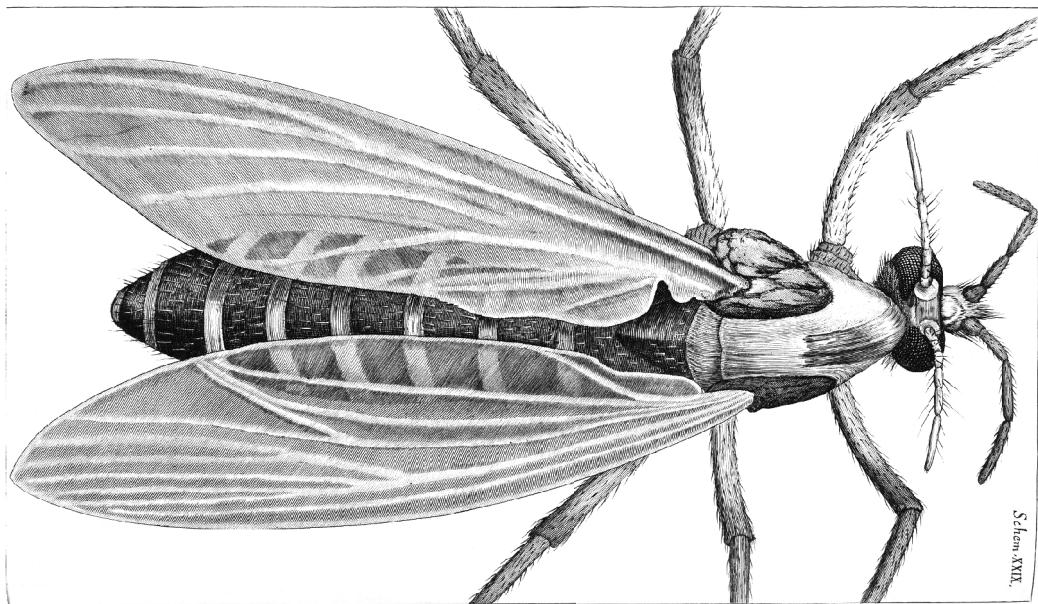


Walden

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Robert Hooke (1635–1703), MICROGRAPHIA or some physiological descriptions of minute bodies made by magnifying glasses with observations and inquiries thereupon. "The great Belly'd Gnat or female Gnat". An illustration of a Gnat thought to have been drawn by Sir Christopher Wren, 1665, Ink on Paper

• Notes •

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## p6– J.G. Ballard’s collapsing future

Medium: 11 minutes 

“J.G. Ballard’s novel High-Rise, long regarded as unfilmable, has after forty years been brought to the screen at the third attempt by the veteran British producer Jeremy Thomas, with Ben Wheatley directing. This article looks at the film and book through the lens of social change.”

## p14– Built to Last

logicmag.io: 15 minutes 

“When overwhelmed unemployment insurance systems malfunctioned during the pandemic, governments blamed the sixty-year-old programming language COBOL. But what really failed? At the time of this writing, in July 2020, the COVID-19 pandemic has killed over 133,000 people in the United States.”

## p23– How to write a plugin for Prettier

Medium: 13 minutes 

“In this post I will show you how to build a very simple plugin for Prettier. You will learn how to structure, test and, of course, write a plugin.”

## p33– Collaboration Without Burnout

Harvard Business Review: 12 minutes 

“So many different people can get to you through different channels, and the pressure is enormous.” “Constant e-mail, international travel, calls at all hours—I was exhausted. The collaborative demands eventually wore me down.” “I always felt I had to do more, go further, save the day.”

## p40– The Founder of Jim’s Mowing will Make you

VICE: 10 minutes 

### Smarter and Save the World

““We’re going to change the world. If my theory is correct, this will change everything. This will ruffle feathers, don’t you think anything else. You ask Galileo, you ask Darwin. This is going to cause an uproar.” – Jim Penman”

## p46– Torn apart: the vicious war over young adult

books The Guardian: 14 minutes 

### books

“Authors who write about marginalised communities are facing abuse, boycotts and even death threats. What is cancel culture doing to young adult fiction? Earlier this month, the author and screenwriter Gareth Roberts announced that his story was being removed from a forthcoming Doctor Who anthology.”

## p54– Le Guin’s Planet of Exile: Anthropological

Tor.com: 13 minutes 

### Speculations on Cultural Difference and Loss

“A biweekly series, The Ursula K. Le Guin Reread explores anew the transformative writing, exciting worlds, and radical stories that changed countless lives. This week we’ll be covering Planet of Exile, first published by Ace Books in 1966.”

## p61– The 2010s Were the End of Normal

The New York Times: 13 minutes 

“Two of the most widely quoted and shared poems in the closing years of this decade were William Butler Yeats’s “The Second Coming” (“Things fall apart; the centre cannot hold”), and W.H.”

## p70– N. K. Jemisin’s Dream Worlds

The New Yorker: 30 minutes 

“Several years ago, N. K. Jemisin, the fantasy and science-fiction author, had a dream that shook her. In her sleep, she found herself standing in a surreal tableau with a massif floating in the distance.”

## p85– Boudica the Warrior Queen

Pocket: 12 minutes 

“In the 1<sup>st</sup> century CE, Boudica, warrior queen of the Iceni people, led an army of 100,000 to victory against the mighty Roman Empire. So complete were Boudica’s triumphs that Rome was in danger of losing control of her province.”

## p92–Why We Sleep—a tale of institutional failure

yingve.hoiseth.net: 11 minutes

“This is the story of how UC Berkeley dropped the ball when they were made aware that one of their professors possibly committed research misconduct. It is also the story of how publishers Press and Penguin failed to even acknowledge the ball’s existence.”

## p100–Set, Series, Archive, Catalogue, Litany, List

post45.org: 10 minutes

“For this forum, we were asked to reflect on “how we write (well).”

## p105–Looking Up at The Whorearchy From the Bottom

street-hooker.com: 10 minutes

“The whorearchy is used to describe the hierarchical difference between the vast number of sex workers based on the stigma they face, how intimate they are with the client and the likelihood of them having interactions with the police.”

## p111–Generative Design is Doomed to Fail

danieldavis.com: 16 minutes

“I tried to recall whether I’d said anything controversial. But my most recent article was relatively tame, just 1,300 words in Architect Magazine about algorithms generating building layouts. If anything, it was complimentary of Autodesk.”

## p121–Society Glenn Hendlar

keywords.nyupress.org: 12 minutes

“The keyword “society” is generally used in academia and everyday life to refer to forms of human collectivity and association, but the scale and values of the formations referenced by the word—and its adjectival form “social”—vary widely.”

## p128–The Age of Diffraction

Ribbonfarm: 23 minutes

“There’s a state of mind that’s been increasingly common for me lately, which I can only describe as a sense of being outdoors in time during inclement temporal weather. I’ve been searching for the right metaphor to describe this feeling, and I think it is the feeling of being diffracted.”

## p141–Body Pleasure

Ribbonfarm: 15 minutes

“Suffering is very serious. Death is very important. Let me instead talk about something else that is becoming both serious and important, as the world gets richer and more awesome: the problem of pleasure. Excessive leisure time is a problem that has only become widespread in the past century.”

# LETTER FROM THE EDITOR

\* WaldenPond.press \* Monday 17 September 2020 \* Ben Doherty \* 1 minute read \*

Hello everybody,

Welcome back! When I make these issues, I get a list of names in the terminal, then I type `all` for everyone, or a number for a specific person. This month, that number passed 50. That was always a goal—not for any particular reason—but it certainly feels good! The next milestone is 100, soon.

There have been some changes to the website. There's no *editorial page* any more, it's baked into the home page. There are some more things coming too; mostly the tedious things that grown up sites need. (Things like being able to change your own address.)

It's been getting warmer here, so I can sit on my balcony and read while I drink a coffee in the morning. From what I can see of the northern hemisphere, you're all sliding slowly into autumn. Time to break out the cozy reading setup. (Very *hygge/ gezelligheid/gemütlichkeit/confort*)

I've been really enjoying the pictures you've been putting on Instagram. There's a lot of outdoor reading going on. Don't forget that the *really* interesting stuff is on the inside!

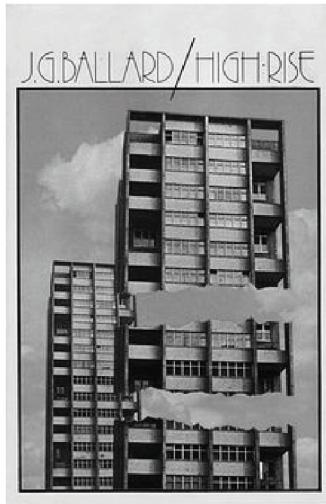
Lots of love

Ben

# J.G. BALLARD'S COLLAPSING FUTURE

\* medium.com \* Saturday 7 May 2016 \* Andrew Curry<sup>1</sup> \* 11 minute read \*

*J.G. Ballard's novel High-Rise, long regarded as unfilmable, has after forty years been brought to the screen at the third attempt by the veteran British producer Jeremy Thomas, with Ben Wheatley directing. This article looks at the film and book through the lens of social change. Although Ballard once said he was only interested in what will happen in "the next five minutes," his novels sit on the edge of dystopia, leaning in to the imminent catastrophes at the end of the modernist era.*



The first edition of High-Rise

One of J.G. Ballard's gifts was that he could sniff out the moments that happen just as waves of change shift from being progressive to being feral. Or to put it another way, to borrow from Marshall McLuhan's Tetrad model, just as a technology shifts

from "enhancing" to "reversing"; reversing, that is, into a sea of adverse consequences. *Crash* (1973), for example, explored cars as a death-fetish; later, *Super-Cannes* (2000) described the corporation just as it took on the characteristics of a private state. So it is with *High-Rise* (1975).

In this article, I plan to locate the book at the intersection of three long trends:

- \* The middle class crisis of the 1970s
- \* The closure of the modern city
- \* The end of the idea of expansive modernity.

In summary and without too many spoilers, *High-Rise* tells the story of a newly-built residential block, the first of a set of five, built to the east of the City of London on what seems geographically to be the derelict dockland that became the financial centre Canary Wharf. The block is highly socially stratified, but only among the middle-classes. At the bottom are film technicians, air stewards and pilots; the wealthy are at the top. The building is vast; early on Ballard describes one floor as being the size of the flight deck of an aircraft carrier.

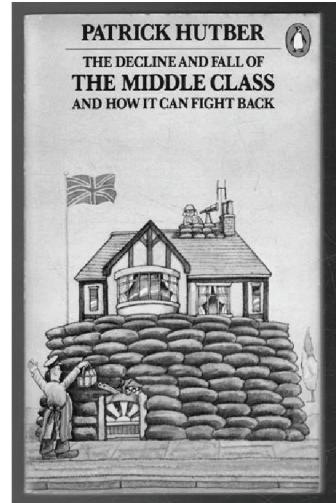
All of the services that might be needed are contained within; supermarket, schools, swimming

pools, tennis and squash courts. With obvious shades of Le Corbusier, it is a machine for living. And then, at first slowly, then much more quickly, the services start to fail. We know how it ends from the very first sentence of the novel, which is told is a long flashback:

*“Later, as he sat on his balcony eating the dog, Dr. Robert Laing reflected on the unusual events that had taken place within this huge apartment building during the previous three months.”*

### The middle class crisis

As we live through the political crisis of the 2010s, it is easy to forget how acute the political crisis of the 1970s was, in the UK and elsewhere. In Britain, 1979 marked the year when income became most equal, measured by the Gini co-efficient, through a combination of high taxation, high inflation, and strong trades unions. As these trends peaked there was social panic. *The Decline and Fall of the Middle Class, and How They Can Fight Back*, by the Sunday Telegraph journalist Patrick Hutber, published in 1976, catches a mild version of this panic.



Middle class panic, 1970s edition

As he writes in the introduction,

*“That this is a time of crisis for the nation is a commonplace, but it is equally a time of crisis for the middle classes, who are subjected to unprecedented pressures, and, at the same time to considerable denigration.” (p9)*

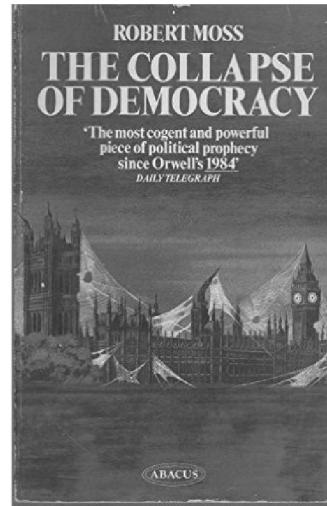
Hutber had used his column in the conservative *Sunday Telegraph* to elicit from his readers their “hopes, fears, and finances,” and the responses say a lot about the electoral appeal of Thatcher, newly elected as Conservative leader, but not yet Prime Minister, with her emphasis on cutting personal taxes, monetarist economics, and her visceral hatred of trades unions.

Much, though, is about the sense of small losses. An architect who writes that the middle class family is “up against the wall,” goes on to explain,

*"I haven't seen a play in London in two years. I only eat in restaurants on business. Can't afford the gardener once a week any more. You start adding it up and it amounts to a social revolution."* (p37)

There were less considered observers than Huther. In the 1970s some in the UK threatened *coup d'état*. In 1974 Colonel David Stirling created GB75 to take over the government should civil unrest prevent its normal operations, although he abandoned the plan when details were published. The former British Army general Walter Walker was involved in Civil Assistance, created in 1974 to supply volunteers in the case of a General Strike and publicised on the front page of the London Evening News.

Robert Moss, who by his own account had "personal experience of political warfare in Portugal, Chile, Vietnam and Northern Ireland," published in 1975 a book in called *The Collapse of Democracy*, which opens with a scenario set in London in 1985:



The future is Leninist, apparently 1975 edition

*"Outside the Ministry of Equality (formerly Buckingham Palace: it was renamed when the Royal Family moved to New Zealand) a couple of sleazy looking individuals had just caught site of a likely touch. One of them sidled up to the solitary American tourist and addressed him with the inevitable, "Psst. Got any dollars?" The official exchange rate was frozen at £48 to the dollar... There is a story of a woman pensioner who lived for six months on a \$20 bill smuggled in by a nephew from Canada.*

*"The Knightsbridge Barracks is now the headquarters of the Volunteer Constables, a new mobile police force. Its nucleus was drawn from the factory militias that appeared in the north of England during the General Strike a few years back."* (p23)

Well, you get the idea. It is almost impossible to look back at the documents of the 1970s and not be surprised by the language and the

claims. Walker told journalists that the then Labour Prime Minister Harold Wilson was a “proven communist,” a view held, wrongly, by elements in the British security services.

In terms of *High-Rise* the point is this: Ballard’s story of social breakdown within this middle-class enclave, in which social status was tightly defined by the floor of the building you could afford, represents a return of the (barely) repressed notion that the order of their lives was close to collapse. More: an important part of the plot is the attempt by one character, Richard Wilder, to climb to the top. He is, literally, social climbing. In the context of the book Wilder’s project is doomed from its start.

### The closure of the city

This sense of middle class crisis was compounded by the decline of the city. In the ’70s London, like New York, was emptying out. Population numbers were in long-term decline. The solution, in effect, was the start of forms of urban segregation, a long squeeze on the radical idea of the city as public space.

Anna Minton charts this in her book *Ground Control*. “The familiar story which is often told,” she writes, “is that during the 1970s and the 1980s inner cities became dangerous places, where crime and violence were rife

and middle class families fled to the suburbs in search of safety and security.” (p25)

In this, the UK seemed to be following the US, where this flight was also spurred by the urban riots of the ’60s and racial conflict.

This misses part of the story, says Minton. The decline of the inner cities followed industrial decline, which hollowed out the small factories and workshops which pepper urban maps of the ’60s and ’70s.

*“As the post-war industrial economy faltered, there simply wasn’t the money to allow local authorities to invest properly in cities. So the private sector came to the rescue, persuaded by the incentive of large amounts of public money.”* (p26)

Canary Wharf, which pioneered this model, was built through a specially created organisation, the London Docklands Development Corporation, a special purpose vehicle which owned the land, had public funding and planning powers, benefited from tax breaks, but was largely unaccountable. Much of the urban regeneration across London and the UK since the 1980s has involved the creation of privately owned public spaces (POPS), typically monitored by CCTV and 24-hour private security guards.



Building Canary Wharf. Photo: Ian Britton/FreeFoto. CC

BY-NC-ND 3.0

At the same time the number of gated communities has risen, along with a rise in policing and council orders that are designed to target behaviour that is deemed anti-social. The third element of closure is the rise of the SUV or 4×4 vehicle, partly because of fears about safety and security. Such vehicles are more safe for those inside them and less safe for everyone else. In *High-Rise* the withdrawal from the city is almost complete. At the start of the novel, people still leave to go to work. By the end, the cars sit unused in the car park. Many have been wrecked or immobilised by objects hurled from the balconies of the building.

### The end of modernity

Both of these trends—the crisis of the middle class and the closure of the city—sit inside a larger crisis: the end of the post-war economic boom and the political and social agreements that sat behind it.



Altamont, 1969: "The crowd of kids held an angel with a knife/ Who carved himself a slice of another guy's life."

Conventionally, this is dated from the oil shock of 1973, but even before this there were clear signs that economic and cultural confidence of the 1960s was deflating. The ugliness of the Altamont Free Festival in December 1969 is a better guide to the times than the peace and love of Woodstock. Perhaps the last moment of real confidence was during the moon landing in 1969. Indeed, Ballard once said that the Apollo programme was the last act undertaken by a government out of a sense of world-historical optimism.

One way to chart these things is to look at the themes of different World Fairs, as Douglas Murphy does in *Lost Futures*. 1939 in New York was dominated by the idea of the automobile; 1958 in Brussels by nuclear power (the Atomium that was the centrepiece is still standing); 1964, once again in New York, on the space

age, with a sliver of computing from IBM. The dominant building aesthetic throughout was that of Le Corbusier.

By 1967, the year of the Montreal Expo, that had changed. Buckminster Fuller designed the American pavilion as a geodesic dome, and the centrepiece was Habitat 67, designed by a young Israeli-Canadian architect Moshe Safdie, “an attempt to create a system of modular pre-fabricated housing, which would both combine the advantages and avoid the problems of suburban sprawl and high density modern housing.”



Habitat 67. Photo: Gergely Vass. CC BY-SA 3.0

There are other markers of the changing mood. Richard Nixon was elected in 1968, and re-elected in 1972, on waves of conservative sentiment. The world’s post-war international financial system unravelled at the start of the 1970s under the pressure of American government debt. The United Nations Stockholm conference on the environment was held in 1972, and Greenpeace and Friends of the Earth were founded just before this. *The Limits to Growth* and *A Blueprint for Survival* were both published in 1972. As Ian Christie noted to me, “by 1972 a narrative of systemic risk and cultural fear was well established, very much counter to the materialist progressivism of the 1960–67 period.”

By the time *High-Rise* was written, the idea of what it meant to be modern had taken a turn for the worse. As the decade wore on, the sense grew of society closing in: by 1977, the Sex Pistols sang, “There is no future in England’s dream.” By 1981, in The Specials’ “Ghost Town,” “everything has been closed down.”

Buckminster Fuller and Moshe Safdie represented a notion of a lightweight future on a human scale, but the message got lost. If the modernity represented by the American model of post-war commodity capitalism was dead culturally, its forms continued to replicate themselves. They became one of Sohail Inayatullah’s “used futures<sup>2</sup>”, a borrowed image of the future that is reproduced unthinkingly.

*High-Rise*, then, captures this sense of malignant reproduction. Some of most significant scenes, in both the book and the film, take place in a supermarket that is rapidly emptying of stock.

### Cancelling the future

In his engaging essay<sup>3</sup> “There Is As Yet Insufficient Data For A Meaningful Answer,” Aaron Jaffe detours usefully around the edge of J.G. Ballard. Jaffe describes Ballard as being “obsessively interested in the near-term catastrophic end: the collapsing inner space of human knowledge systems.” The writer’s own reflections

on his work simultaneously both accept and reject the notion of the future.

"Increasingly, our concepts of past, present and future are being forced to revise themselves," Ballard says in an introduction to *Crash* written in 1995, two decades after the novel. "Just as the past, in social and psychological terms, became a casualty of Hiroshima and the nuclear age, so in its turn the future is ceasing to exist, devoured by the all-voracious present. We have annexed the future into the present."

He is on the same ground here that both David Graeber and Mark Fisher have revisited in recent years. In "Of Flying Cars and the Declining Rate of Profit"<sup>4</sup> Graeber laments that a future he was all but promised as child in the sixties has somehow been switched for one in which the main product is different forms of simulation.

*"In this final stultifying stage of capitalism, we are moving from poetic technologies to bureaucratic technologies. By poetic technologies, I refer to the use of rational and technical means to bring wild fantasies to reality... Computers have played a crucial role in the narrowing of our social imaginations."*

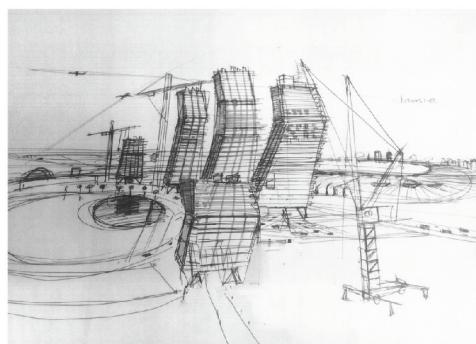
He observes that Alvin Toffler's claim that the pace of change is speeding up, in *Future Shock* (1970), appears just as we reach our top speed,

certainly in aviation, and as the historic growth in the number of scientific papers published levels off.

Fisher, a cultural theorist, riffs on Franco Berardi's phrase "the slow cancellation of the future," reflecting on "the gradual yet relentless way in which the future has been eroded over the last 30 years.... The future didn't disappear overnight." (p13)

Importantly, he acknowledges our part in this. "The capitalist dystopia of 21<sup>st</sup> century culture is not something that was simply imposed on us—it was built out of our captured desires." (p25)

Although it was written before the internet era, *High-Rise* somehow articulates our part in closing down our future. We come looking to make "an investment in the future," as Laing says in the film, early on. And we end up after nights of partying cooking dog over an open fire.



Production design sketch for *High-Rise*, by Mark Tildesley, with thanks to Dezeen.

*This article was first published in the April 2016 edition of Compass, the newsletter of the Association of*

*Professional Futurists.*

From: <https://medium.com/@nextwavefutures/j-g-ballards-collapsing-future-8339169bb2b7>

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- 1. [medium.com/@nextwavefutures](https://medium.com/@nextwavefutures)
  - 2. [benlandau.com](https://benlandau.com) 33Y3
  - 3. [academia.edu](https://academia.edu) oj5Q
  - 4. [thebaffler.com](https://thebaffler.com) hM7u

# BUILT TO LAST

\* logicmag.io \* Monday 14 September 2020 \* Celine Nguyen \* 15 minute read \*

When overwhelmed unemployment insurance systems malfunctioned during the pandemic, governments blamed the sixty-year-old programming language COBOL. But what really failed?

At the time of this writing, in July 2020, the COVID-19 pandemic has killed over 133,000 people in the United States. The dead are disproportionately Black and Latinx people and those who were unable, or not allowed by their employers, to work remotely. During the pandemic, we've seen our technological infrastructures assume ever more importance—from the communications technology that allows people with the means and privilege to telecommute, to the platforms that amplify public health information or deadly, politicized misinformation. We've also seen some of the infrastructure that runs the social safety net break down under an increasing load. This includes state unemployment systems that pay workers the benefits they've contributed to for decades through taxes. In a global pandemic, being able to work from home, to quit and live on savings, or to be laid off and draw unemployment benefits has literally become a matter of life and death.

The cracks in our technological infrastructure became painfully evident in the spring, as US corporations responded to the pandemic by laying off more and more workers. So many people had to file for unemployment at once that computerized unemployment claim systems started to malfunction. Around the country, phone lines jammed, websites crashed, and millions of people faced the possibility of not being able to pay for rent, medicine, or food.

As the catastrophe unfolded, several state governments blamed it on aged, supposedly obsolete computer systems written in COBOL, a programming language that originated in the late 1950s. At least a dozen<sup>1</sup> state unemployment systems still run on this sixty-one-year-old language, including ones that help administer funds of a billion dollars or more in California, Colorado, and New Jersey. When the deluge of unemployment claims hit, the havoc it seemed to wreak on COBOL systems was so widespread that many states apparently didn't have enough programmers to repair the damage; the governor of New Jersey even publicly pleaded for the help of volunteers who knew the language.

But then something strange happened. When scores of COBOL programmers rushed to offer their

services, the state governments blaming COBOL didn't accept the help. In fact, it turned out the states didn't really need it to begin with. For many reasons, COBOL was an easy scapegoat in this crisis—but in reality what failed wasn't the technology at all.

## A “Dead” Language is Born

One of the most remarkable things about the unemployment claims malfunction wasn't that things might suddenly go terribly wrong with COBOL systems, but that they never had before. Many computerized government and business processes around the world still run on and are actively written in COBOL—from the programs that reconcile almost every credit card transaction around the globe to the ones that administer a disability benefits system serving roughly ten million US veterans. The language remains so important that IBM's latest, fastest “Z” series of mainframes have COBOL support as a key feature.

For six decades, systems written in COBOL have proven highly robust—which is exactly what they were designed to be. COBOL was conceived in 1959, when a computer scientist named Mary Hawes, who worked in the electronics division of the business equipment manufacturer Burroughs, called for a meeting of computer professionals at the University of Pennsylvania. Hawes wanted to bring industry,

government, and academic experts together to design a programming language for basic business functions, especially finance and accounting, that was easily adaptable to the needs of different organizations and portable between mainframes manufactured by different computer companies.

The group that Hawes convened evolved into a body called CODASYL, the Conference on Data Systems Languages, which included computer scientists from the major computing hardware manufacturers of the time, as well as the government and the military. CODASYL set out to design a programming language that would be easier to use, easier to read, and easier to maintain than any other programming language then in existence.

The committee's central insight was to design the language using terms from plain English, in a way that was more self-explanatory than other languages. With COBOL, which stands for “Common Business-Oriented Language,” the goal was to make the code so readable that the program itself would document how it worked, allowing programmers to understand and maintain the code more easily.

COBOL is a “problem-oriented” language, whose structure was designed around the goals of business and administrative users, instead of being maximally flexible for the kind of complex mathematical problems that scientific users would need to

solve. The main architect of COBOL, Jean Sammet, then a researcher at Sylvania Electric and later a manager at IBM, wrote, “It was certainly intended (and expected) that the language could be used by novice programmers and read by management.” (Although the pioneering computer scientist Grace Hopper has often been referred to as the “mother of COBOL,” her involvement in developing the specification for the language was minimal; Sammet is the one who really deserves the title.)

Other early high-level programming languages, such as FORTRAN, a language for performing complex mathematical functions, used idiosyncratic abbreviations and mathematical symbols that could be difficult to understand if you weren’t a seasoned user of the language. For example, while a FORTRAN program would require programmers to know mathematical formula notation, and write commands like:

```
TOTAL = REAL(NINT(EARN * TAX *  
100.0))/100.0
```

users of COBOL could write the same command as:

```
MULTIPLY EARNINGS BY TAXRATE  
GIVING SOCIAL-SECUR ROUNDED.
```

As you can tell from the COBOL version, but probably not from the FORTRAN version, this line of code is a (simplified) example of how both languages could compute a social

security payment and round the total to the penny. Because it was designed not just to be written but also to be read, COBOL would make computerized business processes more legible, both for the original programmers and managers and for those who maintained these systems long afterwards.



Image of COBOL tombstone, copyright Mark Richards.  
Courtesy of the Computer History Museum in  
Mountain View, CA.

A portable, easier-to-use programming language was a revolutionary idea for its time, and prefigured many of the programming languages that came after. Yet COBOL was almost pronounced dead even before it was born. In 1960, the year that the language’s specification was published, a member of the CODASYL committee named Howard Bromberg commissioned a little “COBOL tombstone” as a practical joke. Bromberg, a manager at the electronics company RCA who had earlier worked with Grace Hopper on her FLOW-MATIC language, was concerned that by the time everybody finally got done designing COBOL, competitors working on proprietary languages would have swept the

market, locking users into programming languages that might only run well on one manufacturer's line of machines.

But when COBOL came out in 1960, less than a year after Mary Hawes's initial call to action, it was by no means dead on arrival. The earliest demonstrations of COBOL showed the language could be universal across hardware. "The significance of this," Sammet wrote, with characteristic understatement, was that it meant "compatibility could really be achieved." Suddenly, computer users had a full-featured cross-platform programming language of far greater power than anything that came before. COBOL was a runaway success. By 1970, it was the most widely used programming language in the world.

## Scapegoats and Gatekeepers

Over the subsequent decades, billions and billions of lines of COBOL code were written, many of which are still running within financial institutions and government agencies today. The language has been continually improved and given new features. And yet, COBOL has been derided by many within the computer science field as a weak or simplistic language. Though couched in technical terms, these criticisms have drawn on a deeper source: the culture and gender dynamics of early computer programming.

During the 1960s, as computer programming increasingly came to be regarded as a science, more and more men flooded into what had previously been a field dominated by women.

Many of these men fancied themselves to be a cut above the programmers who came before, and they often perceived COBOL as inferior and unattractive, in part because it did not require abstruse knowledge of underlying computer hardware or a computer science qualification. Arguments about which languages and programming techniques were "best" were part of the field's growing pains as new practitioners tried to prove their worth and professionalize what had been seen until the 1960s as rote, unintellectual, feminized work. Consciously or not, the last thing many male computer scientists entering the field wanted was to make the field easier to enter or code easier to read, which might undermine their claims to professional and "scientific" expertise.

At first, however, the men needed help. Looking back, we see many examples of women teaching men how to program, before women gradually receded from positions of prominence in the field. Juliet Muro Oeffinger, one of about a dozen programmers I interviewed for this piece, began programming in assembly language in 1964 after graduating college with a BA in math. "When COBOL became the next hot thing," she said, "I learned COBOL and taught it for Honeywell Computer

Systems as a Customer Education Rep." In the images below, Oeffinger teaches a room full of men at the Southern Indiana Gas and Electric Company how to program in the language. Within a short time, these trainees—who had no prior experience with computer work of any kind—would have been programming in COBOL.



Programmer Juliet Muro Oeffinger teaching students Gerald Griepenstroh, Ron Holander, Von Hale, and Ed Tombaugh how to program in COBOL c. 1967. Photos from the personal collection of Juliet Muro Oeffinger. Another retired programmer I spoke to named Pam Foltz noted that good COBOL was great long-term infrastructure, because it was so transparent. Almost anyone with a decent grasp of programming could

come into a COBOL system built by someone else decades earlier and understand how the code worked. Foltz had a long career as a programmer for financial institutions, retraining in COBOL soon after getting her BA in American studies from the University of North Carolina at Chapel Hill in the 1960s. Perhaps this dual background is one reason why her code was so readable; as one of her supervisors admiringly told her, "You write COBOL like a novel! Anyone could follow your code."

Ironically, this accessibility is one of the reasons that COBOL was denigrated. It is not simply that the language is old; so are many infrastructural programming languages. Take the C programming language: it was created in 1972, but as one of the current COBOL programmers I interviewed pointed out, nobody makes fun of it or calls it an "old dead language" the way people do with COBOL. Many interviewees noted that knowing COBOL is in fact a useful present-day skill that's still taught in many community college computer science courses in the US, and many colleges around the world.

But despite this, there's a cottage industry devoted to making fun of COBOL precisely for its strengths. COBOL's qualities of being relatively self-documenting, having a short onboarding period (though a long path to becoming an expert), and having been originally designed by committee for big, unglamorous, infrastructural business systems all

count against it. So does the fact that it did not come out of a research-oriented context, like languages such as C, ALGOL, or FORTRAN.

In a broader sense, hating COBOL was—and is—part of a struggle between consolidating and protecting computer programmers’ professional prestige on the one hand, and making programming less opaque and more accessible on the other. There’s an old joke among programmers: “If it was hard to write, it should be hard to read.” In other words, if your code is easy to understand, maybe you and your skills aren’t all that unique or valuable. If management thinks the tools you use and the code you write could be easily learned by anyone, you are eminently replaceable.

The fear of this existential threat to computing expertise has become so ingrained in the field that many people don’t even see the preference for complex languages for what it is: an attempt to protect one’s status by favoring tools that gate-keep rather than those that assist newcomers. As one contemporary programmer, who works mainly in C++ and Java at IBM, told me, “Every new programming language that comes out that makes things simpler in some way is usually made fun of by some contingent of existing programmers as making programming too easy—or they say it’s not a ‘real language.’” Because Java, for example, included automatic memory management, it was seen as a less robust language, and the people who programmed in it were

sometimes considered inferior programmers. “It’s been going on forever,” said this programmer, who has been working in the field for close to thirty years. “It’s about gatekeeping, and keeping one’s prestige and importance in the face of technological advancements that make it easier to be replaced by new people with easier to use tools.” Gatekeeping is not only done by people and institutions; it’s written into programming languages themselves.

In a field that has elevated boy geniuses and rockstar coders, obscure hacks and complex black-boxed algorithms, it’s perhaps no wonder that a committee-designed language meant to be easier to learn and use—and which was created by a team that included multiple women in positions of authority—would be held in low esteem. But modern computing has started to become undone, and to undo other parts of our societies, through the field’s high opinion of itself, and through the way that it concentrates power into the hands of programmers who mistake social, political, and economic problems for technical ones, often with disastrous results.

## The Labor of Care

A global pandemic in which more people than ever before are applying for unemployment is a situation that COBOL systems were never designed to handle, because a global catastrophe on this scale was never

supposed to happen. And yet, even in the midst of this crisis, COBOL systems didn't actually break down. Although New Jersey's governor issued his desperate plea for COBOL programmers, later investigations<sup>3</sup> revealed that it was the website through which people filed claims, written in the comparatively much newer programming language Java, that was responsible for the errors, breakdowns, and slowdowns. The backend system that processed those claims—the one written in COBOL—hadn't been to blame at all.

So why was COBOL framed as the culprit? It's a common fiction that computing technologies tend to become obsolete in a matter of years or even months, because this sells more units of consumer electronics. But this has never been true when it comes to large-scale computing infrastructure. This misapprehension, and the language's history of being disdained by an increasingly toxic programming culture, made COBOL an easy scapegoat. But the narrative that COBOL was to blame for recent failures undoes itself: scapegoating COBOL can't get far when the code is in fact meant to be easy to read and maintain.

That said, even the most robust systems need proper maintenance in order to fix bugs, add features, and interface with new computing technologies. Despite the essential functions they perform, many COBOL systems have not been well cared for. If they had come close to faltering in

the current crisis, it wouldn't have been because of the technology itself. Instead, it would have been due to the austerity logic to which so many state and local governments have succumbed.

In order to care for technological infrastructure, we need maintenance engineers, not just systems designers—and that means paying for people, not just for products. COBOL was never meant to cut programmers out of the equation. But as state governments have moved to slash their budgets, they've been less and less inclined to pay for the labor needed to maintain critical systems. Many of the people who should have been on payroll to maintain and update the COBOL unemployment systems in states such as New Jersey have instead been laid off due to state budget cuts. As a result, those systems can become fragile, and in a crisis, they're liable to collapse due to lack of maintenance.

It was this austerity-driven lack of investment in people—rather than the handy fiction, peddled by state governments, that programmers with obsolete skills retired—that removed COBOL programmers years before this recent crisis. The reality is that there are plenty of new COBOL programmers out there who could do the job. In fact, the majority of people in the COBOL programmers' Facebook group are twenty-five to thirty-five-years-old, and the number of people being trained to program and maintain COBOL systems globally is

only growing. Many people who work with COBOL graduated in the 1990s or 2000s and have spent most of their twenty-first century careers maintaining and programming COBOL systems.

If the government programmers who were supposed to be around were still on payroll to maintain unemployment systems, there's a very good chance that the failure of unemployment insurance systems to meet the life-or-death needs of people across the country wouldn't have happened. It's likely those programmers would have needed to break out their Java skills to fix the issue, though. Because, despite the age of COBOL systems, when the crisis hit, COBOL trundled along, remarkably stable.

Indeed, present-day tech could use more of the sort of resilience and accessibility that COBOL brought to computing—especially for systems that have broad impacts, will be widely used, and will be long-term infrastructure that needs to be maintained by many hands in the future. In this sense, COBOL and its scapegoating show us an important aspect of high tech that few in Silicon Valley, or in government, seem to understand. Older systems have value, and constantly building new technological systems for short-term profit at the expense of existing infrastructure is not progress. In fact, it is among the most regressive paths a society can take.

As we stand in the middle of this pandemic, it is time for us to collectively rethink and recalculate the value that many so-called tech innovations, and innovators, bring to democracy. When these contributions are designed around monetizing flaws or gaps in existing economic, social, or political systems, rather than doing the mundane, plodding work of caring for and fixing the systems we all rely on, we end up with more problems than solutions, more scapegoats instead of insights into where we truly went wrong.

There are analogies between the failure of state unemployment systems and the failure of all sorts of public infrastructure: Hurricane Sandy hit the New York City subway system so hard because it, too, had been weakened by decades of disinvestment. Hurricane Katrina destroyed Black lives and neighborhoods in New Orleans because the levee maintenance work that was the responsibility of the federal government was far past due, a result of racist resource allocation. COVID-19 continues to ravage the United States more than any other nation because the federal infrastructure needed to confront public health crises has been hollowed for decades, and held in particular contempt by an Administration that puts profits over people, and cares little, if at all, about the predominantly Black and Latinx people in the US who are disproportionately dying.

If we want to care for people in a pandemic, we also have to be willing to pay for the labor of care. This means the nurses and doctors who treat COVID patients; the students and teachers who require smaller, online classes to return to school; and the grocery workers who risk their lives every day. It also means making long-term investments in the engineers who care for the digital infrastructures that care for us in a crisis.

When systems are built to last for decades, we often don't see the disaster unfolding until the people

who cared for those systems have been gone for quite some time. The blessing and the curse of good infrastructure is that when it works, it is invisible: which means that too often, we don't devote much care to it until it collapses.

From: <https://logicmag.io/care/built-to-last/>

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1. theverge.com  **usuw**

2. computerhistory.org  **y5b1**

3. wired.com/story/cant-file-unemployment-dont-blame-cobol

# HOW TO WRITE A PLUGIN FOR PRETTIER

\* medium.com \* Sunday 27 January 2019 \* Franco Victorio<sup>1</sup> \* 13 minute read \*

In this post I will show you how to build a very simple plugin for Prettier<sup>2</sup>. You will learn how to structure, test and, of course, write a plugin. I'm far from being an expert on this, but I learned a lot by contributing to the Solidity plugin<sup>3</sup>, and noticed that there doesn't seem to be a lot of material on this subject, except for the official documentation.

We'll be using TOML<sup>4</sup> as the example language. I chose TOML because it has an easy syntax and, as far as I know, there's no Prettier plugin for it. The result won't be a usable plugin, as you'll see, but with any luck you will learn enough to develop a proper one.

Why would you want to learn this? Well, there are two strong reasons. First, you'll be able to create a plugin for any language that is not supported yet (like TOML and Dockerfile, but there probably are many others). And second, you'll be able to contribute to one of the existing plugins<sup>5</sup>. Moreover, since the core of Prettier itself is written using the plugin API, you could even contribute to the main repository if you wanted to.

## How Prettier works?

At its core, what Prettier does is very simple: it takes some code (a string), converts it to an AST (Abstract Syntax Tree, a representation of the code) and then prints the code using only the AST. That means that the style of the original code is (almost) completely ignored. You can learn more in the original blog post<sup>6</sup>.

For our purposes, the important part is that we need a parser that transforms the code to an AST, and a function that takes this and pretty-prints it. Our initial setup already has a configured parser, using `toml-node`<sup>7</sup>, so we only need to worry about the printer function.

## Setup

First we'll clone this repository<sup>8</sup> that has all the boilerplate you'll need to start. I'll explain its contents soon. After cloning it, go the top level directory and run `npm install` to install the dependencies. You should now be able to run the plugin in the example file (`example.toml`) with this command:

```
./node_modules/.bin/prettier --plugin . example.toml
```

There's also a npm script for this, so `npm run example` should work too, but this shows how to run the plugin in any file you want.

After running the command, you won't see any output, and that's OK. For now, our plugin doesn't emit anything: when the printer function receives the AST, it just returns an empty string.

There's also an initial test that you can run with `npm test`. Our tests will be written in jest, using snapshots<sup>9</sup>, but since the setup is already there the only thing you have to do is to add new fixtures. This initial test will format the contents of `tests/StringAssignements/example.toml` and compare the result with the expected output in the snapshot. All of our tests will be like this one: a TOML file and a snapshot with the correct format. This test will fail, of course, but our first goal is to make it pass.

All the code we'll write will be in the `src/index.js` file. In fact, everything will be inside a single function: `printToml`. You can take a look at the rest of the file, but don't worry about the details. If you are curious, it's all explained here<sup>10</sup>.

And if you want to read the finished code instead of writing it, just checkout the `finished` branch instead.

## The printer function

The `printToml` function is very simple. It takes three arguments:

- `path`, that represents a node in the AST
- `options`, that represents the configuration given to prettier (the combination of `.prettierrc` and the flags given to the command, among other things)
- and `print`, that is how we call the printer function recursively

Notice that I said that `path` is **some** node in the AST, not the root. That's because the function is called recursively. For example, if I have the body of a function, I may want to pretty-print each individual statement separately and then do

something with this result. This will become clearer as we continue.

This is the boilerplate of our function:

The first line just extracts the AST node from the `path`. This is because `path` has some extra information and logic related to the AST node.

Then we have a strange block that checks if the node is an array. This will only be necessary in the initial call, because the parser that we are using represents the code as a list of nodes, not as a tree of nodes. Don't worry about this, but keep it in mind, because later this will impose some serious limitations to our plugin.

Finally, we have the switch. Here's where we'll spend most of our time. The logic we have is very simple: we check the type of the AST node and act accordingly. Let's start to fill it in.

## A simple assignment

If you take a look at our test, you'll see that it contains two key/value pairs. The node that represents the first pair is something like this:

```
{  
  type: 'Assign',  
  value: {  
    type: 'String',  
    value: 'TOML Example',  
    line: 1,  
    column: 9  
  },  
  line: 1,  
  column: 1,  
  key: 'title'  
}
```

(How do we know this? There are a lot of ways of obtaining it: a good old `console.log`, using the parser in the node REPL, or running the plugin using `ndb11` and inspecting the value.)

There are two interesting things here. First, the `type` property, that is what we use in our switch. The second one is that, while the `key` of our pair is a simple string, *our value is another AST node*, whose type is `String`.

So the first thing we'll do is to add a clause for `Assign` nodes:

There's a lot to unpack here, but the main idea is easy to grasp: we are telling prettier that an assignment is printed by concatenating four things:

- The key. Remember that this is just a plain string
- A literal equal sign, padded with spaces
- The result of pretty-printing the value of the assignment, whatever that is
- And a **hardline**

What are `concat` and `hardline`? They are called **builders**, and they are functions and values that we use to build the result we want. We already have imported `concat`, but we need to add `hardline` to the list of builders we are using:

The `concat` builder is easy to understand: it tells prettier to just concatenate the list of parts it's given. And `hardline` just means "put a line break", no matter what. You can see the full list of builders [here](#)<sup>12</sup>.

What about the `path.call(print, 'value')` part? This is a prettier idiom and it just means "call the printer function recursively, using the node that is in the '`value`' key". Why can't we just do `print(node.value)`? Well, remember that the printer function expects a *path*, that is, a wrapped node, not a node. So you have to do it like this.

If we add just this and run our test, it will fail. The diff tells us that the keys and the equal sign were printed, but not the value. This makes sense, since the values are nodes of type `String` and we don't have a clause for that yet.

Fortunately, that clause is very simple. Take a look at the AST sub-node again and see if you can guess it.

Yes, it's that easy:

You may have guessed just `return node.value`, but that would've been wrong, because in that case we would be printing just the content of the string, not the full string. For example, `foo = "bar"` would've been printed as `foo = bar`.

If we run our test again, it should pass now.

## Adding support for other values

TOML supports other data types besides strings, and we should support them too. If you look at the example in the root directory, you'll see that it has numbers, booleans, dates, and lists.

Numbers and booleans are easy:

We have to convert them to strings, because that's what prettier expects, but that's it.

Dates are a little trickier and here we'll run into the first limitation of the parser we are using. Here's the AST representation of a date assignment:

```
{  
  type: 'Assign',  
  value: {  
    type: 'Date',  
    value: 1979-05-27T15:32:00.000Z,  
    line: 5,  
    column: 7  
  },  
  line: 5,  
  column: 1,  
  key: 'dob'  
}
```

Look at the value of the date. That is a **Date** object, a unique representation of a date. But if you take a look at the TOML spec, you'll see that you can specify dates in many different formats. That is lost to us during parsing, so we'll always print dates with the same representation.

That's not nice at all! But to do it properly, we should have a parser that, for example, keeps in the AST a string with the original representation. But for now, we'll have to settle for this.

## Tables

In TOML, we can separate different sections with what the spec calls “Tables”, but our parser assigns the type **ObjectPath**. An AST node looks like this:

```
{  
  type: 'ObjectPath',  
  value: [ 'owner' ],
```

```
    line: 3,  
    column: 1  
}
```

As you see, the value of the node is not a string but an array. This is because we can have nested sections like `[servers.alpha]`. We print this with the following clause:

Nothing new here. We join each part of the `value` with a period and surround everything with square brackets.

## Arrays

So far, everything we've done has been very straightforward. Arrays are a little more complex, and we'll have to make some decisions. There are several ways in which an array can be printed, for example:

```
arr1 = [1, 2, 3]  
arr2 = [ 1, 2, 3 ]  
arr3 = [1,2,3]  
arr4 = [  
  1,  
  2,  
  3  
]
```

Here's what prettier usually does in situations like this: if the array fits in one line, print it in one line. Otherwise, print everything on its own line. So we'll do the `arr1` approach when the array fits, and we'll print something like `arr4` when it doesn't.

That seems hard, doesn't it? But prettier can help us. This is the clause that does what we want:

I know this is quite a jump from what we've been doing so far. And the bad news is that a lot of plugin code looks somewhat like this. The good news is that you get used to it quickly.

Let's start from the innermost part of that expression and work our way out.

First we have a `path.map(print, 'value')` expression. This is similar to the `path.call` idiom we discussed before, but here we are saying "in the `value` key of this node I have an array of sub-nodes; call the printer function on each one and give me an array with the results". In other words, it's like doing `node.value.map(print)`, but remember that we can't do that.

So we have an array with the result of pretty-printing each element in our list. The next step is adding our commas. We use the `join` builder for that. Its signature is `join(separator, list)`, and it just joins the list of parts with the given separator. For example, `concat(["1", ", ", "2", ", ", "3"])` is equivalent to `join(", ", ["1", "2", "3"])`. And we could do that here, right? Just `join(", ", path.map(print, 'value'))`. But we want to have a space after the comma when the list fits in one line, and a line break when we split it. That is done with the `line` builder, and that's why we join by `concat(", ", line")`. The documentation is clear:

Specify a line break. If an expression fits on one line, the line break will be replaced with a space. Line breaks always indent the next line with the current level of indentation.

So we print each value separated by a comma and a space if the list fits in one line, and we replace the spaces with line breaks if it doesn't fit. We should be ready, right? Just add the opening and closing square brackets and be done with it. Well, no. Because we want to indent each element of the list when we split it.

We do that by surrounding what we have done so far with `indent(concat([softline, ...]))`. What is going on here? First we put a `softline` at the beginning of the list. `softline` is very similar to `line`, but the difference is that, if everything fits in one line, `softline` is replaced with an empty string. We also use the `indent` builder, that just increases the indentation. When everything fits in one line, we won't have line breaks, so `indent` won't do anything.

Almost there! After that, we surround everything with `concat('[', ..., softline, ']')`. We are just adding the brackets. We also add a `softline` before the closing bracket, and since it's outside the `indent` builder, the `]` will have the same indentation we started with. Otherwise our lists would look like this:

```
arr = [  
    1,  
    2  
]
```

And **finally** we surround everything with a call to `group`. This is a builder that tries to fit everything inside it in one line. If it doesn't, it will start replacing lines and softlines with line breaks. It's actually a little more complex, but that explanation will do for now. Check the documentation to see the nuances of it.

Again, this seems hard, but you'll get it quickly when you start playing with prettier. All of this also shows how powerful prettier is, if you think about it. We've used just a few building blocks to pretty-print any list. In fact, this will work even with nested list, no matter how deep they are!

## Aside: How to experiment

How can you check how builders interact, besides reading the documentation and running your full plugin with some examples? It turns out you can use the node REPL to interact with prettier. First start the REPL and import some stuff:

```
> const prettier = require('prettier')
> const print = prettier.doc.printer.printDocToString
> const { concat, join } = prettier.doc.builders
```

And then you can experiment with the builders:

```
> print(concat(['foo', 'bar', 'baz']), {})
{ formatted: 'foobarbaz' }
> print(join('|', ['foo', 'bar', 'baz']), {})
{ formatted: 'foo|bar|baz' }
```

To test things like `group`, you'll need to specify a `printWidth`:

```
> print(group(join(line, ['foo', 'bar', 'baz', 'qux'])), { printWidth: 20 })
{ formatted: 'foo bar baz qux' }
> print(group(join(line, ['foo', 'bar', 'baz', 'qux'])), { printWidth: 10 })
{ formatted: 'foo\nbar\nbaz\nqux' }
> print(group(join(softline, ['foo', 'bar', 'baz', 'qux'])), { printWidth: 20 })
{ formatted: 'foobarbazqux' }
> print(group(join(softline, ['foo', 'bar', 'baz', 'qux'])), { printWidth: 10 })
{ formatted: 'foo\nbar\nbaz\nqux' }
```

You can learn this way. I know it's not a great user experience, and it would be nice to have something better (maybe a web playground where you can run expressions like this and see the result with different inputs?), but I'm not aware of anything better.

## Pending things

If we run our example again, we'll see that we have an equivalent TOML printed as we specified it:

```
> prettier-plugin-toml@0.0.1 example /home/fvictorio/repos/prettier-plugin-toml
> prettier --plugin . example.toml
title = "TOML Example"
```

```

[owner]
name = "Tom Preston-Werner"
dob = 1979-05-27T15:32:00.000Z

[database]
server = "192.168.1.1"
ports = [8001, 8001, 8002]
connection_max = 5000
enabled = true

[servers]
[servers.alpha]
ip = "10.0.0.1"
dc = "eqdc10"
[servers.beta]
ip = "10.0.0.2"
dc = "eqdc10"

[clients]
data = [{"gamma": "delta"}, [1, 2]]
hosts = ["alpha", "omega"]

```

But it would be hard to argue that this is *prettier*. There are too very important things we are not doing, and that we can't do easily with the parser we are using:

- We are not preserving **blank lines**. Prettier's philosophy is to keep them (although if there are two or more blank lines together, they are replaced by a single blank line). This can be done, but to do that we need an easy way to get the start and end indices of the node. As you see in the nodes examples, we only have the starting line and column.
- We are not **indenting the tables**. This would be relatively easy if the representation of the AST would be a proper tree, but remember that we have instead a list of nodes for each line. If under the table objects we'd have a, say, "children" key, we could do something like `path.map(print, 'children')`, join that by hardlines and indent them, for example.

## What's next?

Hopefully you learned enough to start your own plugin or contribute to one. Take a look at the list of plugins<sup>5</sup>: if the language you would like to see prettified isn't there, you can create your own! And if it is, you can jump on and contribute.

A nice thing about prettier plugins is that it's very easy to do TDD with them. If you want to contribute to a plugin, just add a fixture with an example that it's not working and try to make all tests pass. If you are creating a new plugin you

can start small: add tests with some simple examples using a subset of the syntax and make them prettier!

From: <https://medium.com/@fvictorio/how-to-write-a-plugin-for-prettier-a0d98c845e70>

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1. [medium.com/@fvictorio](https://medium.com/@fvictorio)
  2. [prettier.io](https://prettier.io)
  3. [github.com/prettier-solidity/prettier-plugin-solidity](https://github.com/prettier-solidity/prettier-plugin-solidity)
  4. [github.com/toml-lang/toml](https://github.com/toml-lang/toml)
  5. [prettier.io/docs/en/plugins.html](https://prettier.io/docs/en/plugins.html)
  6. [jlongster.com/A-Prettier-Formatter](https://jlongster.com/A-Prettier-Formatter)
  7. [github.com/BinaryMuse/toml-node](https://github.com/BinaryMuse/toml-node)
  8. [github.com/fvictorio/prettier-plugin-toml](https://github.com/fvictorio/prettier-plugin-toml)
  9. [jestjs.io/docs/en/snapshot-testing](https://jestjs.io/docs/en/snapshot-testing)
  10. [github.com/AYNQ/developing-plugins](https://github.com/AYNQ/developing-plugins)
  11. [github.com/GoogleChromeLabs/ndb](https://github.com/GoogleChromeLabs/ndb)
  12. [github.com/prettier/prettier/blob/master/commands.md](https://github.com/prettier/prettier/blob/master/commands.md)

# COLLABORATION WITHOUT BURNOUT

\* hbr.org \* Saturday 30 June 2018 \* Rob Cross<sup>1</sup>, Scott Taylor<sup>2</sup> and Deb Zehner<sup>3</sup> \* 12 minute read \*



ROMUALDO FAURA

*So many different people can get to you through different channels, and the pressure is enormous.”*

*“Constant e-mail, international travel, calls at all hours—I was exhausted. The collaborative demands eventually wore me down.”*

*“I always felt I had to do more, go further, save the day. I would become people’s life raft and then almost drown.”*

These are the voices of collaborative overload.

As organizations become more global, adopt matrixed structures, offer increasingly complex products and services, and enable 2<sup>1/2</sup> communication, they are requiring employees to collaborate with more internal colleagues and external contacts than ever before. According to research from Connected Commons, most managers now spend 85% or more of their work time on e-

mail, in meetings, and on the phone, and the demand for such activities has jumped by 50% over the past decade. Companies benefit, of course: Faster innovation and more-seamless client service are two by-products of greater collaboration. But along with all this comes significantly less time for focused individual work, careful reflection, and sound decision making. A 2016 HBR article coauthored by one of us dubbed this destructive phenomenon *collaborative overload* and suggested ways that organizations might combat it.

Over the past few years we’ve conducted further research—both quantitative and qualitative—to better understand the problem and uncover solutions that individuals can implement on their own. Working with 20 global organizations in diverse fields (software, consumer products, professional services, manufacturing, and life sciences), we started by creating models of employees’ collaborations and considering the effect of those interactions on engagement, performance, and voluntary attrition. We then used network analyses to identify efficient collaborators—people who work productively with a wide variety of others but use the least amount of their own and their colleagues’ time—

and interviewed 200 of them (100 men and 100 women) about their working lives. We learned a great deal about how overload happens and what leaders must do to avoid it so that they can continue to thrive.

Not surprisingly, we found that always-on work cultures, encroaching technology, demanding bosses, difficult clients, and inefficient coworkers were a big part of the problem, and most of those challenges do require organizational solutions. But we discovered in many cases that external time sinks were matched by another enemy: individuals' own mindsets and habits. Fortunately, people can overcome those obstacles themselves, right away, with some strategic self-management.

Much overload is driven by your desire to maintain a reputation as helpful.

We uncovered best practices in three broad categories: *beliefs* (understanding why we take on too much); *role, schedule, and network* (eliminating unnecessary collaboration to make time for work that is aligned with professional aspirations and personal values); and *behavior* (ensuring that necessary or desired collaborative work is as productive as possible). Not all our recommendations will suit everyone: People's needs differ by personality, hierarchical level, and work context. But we found that when the people we studied took action on just four or five

of them, they were able to claw back 18% to 24% of their collaborative time.

## Two Types of Overload

Collaborative overload generally occurs in either a surge or a slow burn. A surge can result from a promotion, a request from a boss or a colleague to take on or help out with a project, or the desire to jump into an "extracurricular" work activity because you feel obligated or don't want to miss out. Consider Mike, an insurance company executive who was already managing multiple projects—one of which had his entire team working day and night to turn around a struggling segment of the business. When his boss asked him to help create a new unit that would allow the company to present a single face to the market, he felt he couldn't say no. It was a great development opportunity—to which his skills were perfectly suited—and it offered prime exposure to senior management. Yet he couldn't abandon his existing team in the midst of its work. So he decided to do both jobs at once.

A slow burn is more insidious and occurs through incremental increases in the volume, diversity, and pace of collaborative demands over time, as personal effectiveness leads to larger networks and greater scope of responsibilities. Go-to people in organizations suffer from this type of overload. As we gain experience, we often tend to take on more work, and our identities start to become

intertwined with accomplishment, helping, or being in the know. We tend not to question what we are doing as we add tasks or work late into the night on e-mail. And, of course, our colleagues welcome these tendencies; as we gain reputations for competence and responsiveness, people in our networks bring us more work and requests. Ellen, an 18-year veteran of a Fortune 100 technology company, is a case in point. She was fiercely driven and took pride in her ability to help colleagues, solve problems, and cut through bureaucracy to get things done. Eventually, however, she felt weighed down by a list of projects and commitments that were “beyond the realm of doable.”

Though Mike’s and Ellen’s situations are different, our research suggests that the solutions to their and others’ overload problems are similar. They cannot continue to work the same way they always have and remain effective. They need to take better charge of their working lives.

## Why We Take on Too Much

The first step in combating collaborative overload is to recognize how much of it is driven by your own desire to maintain a reputation as a helpful, knowledgeable, or influential colleague or to avoid the anxiety that stems from ceding control over or declining to participate in group work. For example, someone who engages in the entire life cycle of a

small project, beyond the time when the need for her expertise has passed, might pride herself on supporting teammates and ensuring a high-quality result. But that’s not the kind of collaboration that makes a difference over the long term; indeed, too much of it will prevent her from doing more-important work.

Knowing why you accept collaborative work—above and beyond what your manager and your company demand—is how you begin to combat overload. When we counsel executives, we ask them to reflect on the specific identity-based triggers that most often lead them into overload. For example: Do you crave the feeling of accomplishment that comes from ticking less challenging items off your to-do list? Does your ambition to be influential or recognized for your expertise cause you to attend meetings or discussions that don’t truly require your involvement? Do you pride yourself on being always ready to answer questions and pitch in on group work? Do you agree to take on collaborative activities because you’re worried about being labeled a poor performer or not a team player? Are you uncomfortable staying away from certain issues or projects because you fear missing out on something or aren’t sure the work will be done right without you? Most executives we’ve encountered answer yes to one if not several of those questions.

Efficient collaborators remember that saying yes to something always means saying no to—or participating less fully in—something else. They remind themselves that small wins (an empty in-box, a perfectly worded report, a single client call) are not always important ones. They think carefully about their areas of expertise and determine when they do, or don't, have value to add. They stop seeing themselves as indispensable and shift the source of their self-worth so that it comes from not just showcasing their own capabilities but also stepping away to let others develop theirs and gain visibility.

As one executive told us, “I have come to the realization that if people really need me, they will find me. I am probably skipping 30% of my meetings now, and work seems to be getting done just fine.”

When Mike found himself at a breaking point with his twin projects, he realized how much of his self-worth derived from always saying yes to—and then achieving—the goals suggested to him. “It took falling down and a patient spouse to really see this pattern,” he says. He decided that he needed to set clear priorities in both his career and his personal life. “Then saying no was not about my not coming through but about maintaining focus on what mattered.”

Efficient collaborators decide when they do, or don't, have unique value to add.

Ellen, too, realized that her self-image as a helper—constantly looking for opportunities to contribute and never declining a request—had become problematic. “The difficult part is recognizing this tendency in the moment and working hard not to jump in,” she acknowledges. “But I told my team how important this was and also asked a few people to be ‘truth tellers’ who caution me when they see it happening.”

## **Eliminating the Unnecessary**

Next you'll need to restructure your role, schedule, and network to avoid the triggers you've identified and reduce or eliminate unnecessary collaboration. Rather than thinking things will get better on their own, living reactively, and falling into patterns dictated by other people's objectives, efficient collaborators play offense on collaborative overload. They clarify their “north star” objectives—the strengths they want to employ in their work and the values they want to embody, in the context of their organization's priorities—and then streamline their working lives in a way that buffers them against nonaligned requests.

Start by reviewing your calendar and e-mail communications on a regular basis, using a tool such as Microsoft's MyAnalytics or Cisco's “human network intelligence” platform. Look back four or five months to identify recurring group activities, meetings, or exchanges that aren't core to your

success and could be declined or offered to others as a developmental opportunity. Consider decisions you're being pulled into unnecessarily and how processes or teams might be changed so that you needn't be involved. Recognize when you're being sought out for information or expertise in areas no longer central to your role or ambitions and figure out whether you could share your knowledge more widely on your company's intranet or if another go-to person might derive greater benefit from that collaboration.

At the same time, work to reset colleagues' expectations about the level and timeliness of your engagement. Clarify, for example, that not responding to a group e-mail or opting out of a meeting does not mean you lack interest or appreciation. Talk about your key priorities so that everyone knows what you need (and want) to spend the most time on. Ask colleagues about their interests and ambitions so that you can identify opportunities to distribute or delegate work. A key inflection point for all the executives we've counseled has been when they start seeing requests for collaboration as ways to activate and engage those in their networks rather than as adding to their own to-do lists.

Finally, block out time for reflective work and seek collaboration with those who can help you move toward your north star objectives. Mike focused on building capabilities in the business unit he directed. Instead of jumping at unrelated projects for

political exposure, he began to differentiate himself through expertise and his team's contribution. Ellen's strategy was to create exceptionally clear boundaries: "I am there 8 AM to 6 PM, and people know I give 100% then. But after that I don't let myself get drawn into unnecessary e-mail, calls, or late-night work just to help out."

Another leader described the shift like this: "Playing defense sucks. You are always reactive and living in fear. The only way to escape it is to get clarity on who you are and what you want to do and start forging a path and network that enable you to get there."

## Keeping It Productive

Once you've taken stock of your collaborative workload, it's time to enhance the value of the collaboration you've chosen to participate in. Our research suggests that poorly run meetings are the biggest time sink in organizations. Even if you don't control the ones you attend, you can make them more productive by, for example, asking the leader to circulate an agenda or a pre-read before the gathering and a short e-mail on agreements, commitments, and next steps afterward. You can also limit your involvement by explaining that you have a hard stop (real or constructed) so that you're not stuck when others run overtime, and asking to attend only those portions for which you are needed or agreeing to half the time a colleague or employee requests. It's crucial to establish

norms early on in any relationship or group. If you wait, problems will become harder to address.

You can also institute or encourage new norms for e-mails by addressing format (for example, observing a maximum length and choosing an outline structure with bullets, as opposed to full-text paragraphs), the use of “cc” and “reply all,” and appropriate response times for various types of requests. Consider virtual collaboration tools (such as Google Docs), which offer a better medium for work that is exploratory (defining a problem space or brainstorming solutions) or integrative (when people with varying expertise, perspectives, or work assignments need to produce a joint solution). The key is to ensure that you’re using the right tools at the right time and not worsening collaborative demands. You should also learn to recognize when a conversation has become too complicated or contentious for e-mail or chat and switch to a more efficient phone call or face-to-face meeting.

For one-on-one interactions, always consider whether you are consuming your counterpart’s time efficiently. Ask yourself, “Am I clear on what I want to accomplish from a meeting or a conversation?” And invite others to be equally disciplined by asking early on, “So that I use your time well, would you quickly let me know what you hope we can accomplish together?”

When it comes to building your network, focus on the quality of the relationships, not the number of connections. We repeatedly found that efficient collaborators draw people to collaborative work by conferring status, envisioning joint success, diffusing ownership, and generating a sense of purpose and energy around an outcome. By creating “pull”—rather than simply pushing their agenda—they get greater and more-aligned participation and build trust so that people don’t feel the need to seek excessive input or approval.

Ellen, for example, decided to engage stakeholders in collaborative work early to save time later in the process. “I used to dot every i and cross every t before approaching others,” she says. “But I’ve learned that if I get a plan partially developed and then bring in my team, my boss, even my clients, they get invested and help me spot flaws, and I avoid tons of downstream work to fix things or convince people.” Another leader we know schedules one-on-ones with direct reports to discuss priorities, values, and personal aspirations, enhancing their ability to work together efficiently as a team in the future. “There are so many ways people can misinterpret actions and then cause a lot of churn later,” he says. “If I spend the time to give them a sense of where I’m coming from, it saves all sorts of time in unnecessary collaborations.”

## CONCLUSION

The recent explosion in the volume and diversity of collaborative demands is a reality that's here to stay. Unfortunately, the invisible nature of these demands means that few organizations are managing collaborative activity strategically. So it falls to you, the individual, to fight overload and reclaim your collaborative time.

To evaluate your state of collaborative overload, go to [networkassessments.org](https://networkassessments.org)<sup>4</sup> and take the assessment built from this research.

From: <https://hbr.org/2018/07/collaboration-without-burnout>

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1. [hbr.org/search?term=rob%20cross](https://hbr.org/search?term=rob%20cross)
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  4. [networkassessments.org](https://networkassessments.org)

# THE FOUNDER OF JIM'S MOWING WILL MAKE YOU SMARTER AND SAVE THE WORLD

\* vice.com \* Thursday 9 May 2013 \* Dom Amerena<sup>1</sup> \* 10 minute read \*



Image via<sup>2</sup>

*"We're going to change the world. If my theory is correct, this will change everything. This will ruffle feathers, don't you think anything else. You ask Galileo, you ask Darwin. This is going to cause an uproar."* – Jim Penman

You've probably seen a picture of Jim Penman's face on the sides of his trucks. There are thousands of them driving around the country, mowing your lawns, fixing your antennas, washing your dogs. In the picture Jim has a thick beard and he's wearing a bucket hat. He's always smiling.

I'm sitting across from Jim at his training centre in a sprawling complex in the foothills of the Dandenong Ranges. He started his business, Jim's Mowing, back in 1982. He's aged a bit since then, and he's

lost the beard, but as he tells me about his plans for world domination, he's still smiling.

The story of Jim's rise to fame and fortune is already a matter of public record: cash-strapped uni student begins a lawn mowing business to help pay his tuition. With an initial budget of \$24, business grows to become a gardening leviathan. With over 3000 franchisees throughout Australia, New Zealand and the UK, Jim's Group provides 35 different services from Jim's Bookkeeping to Jim's Bath Resurfacing. At 60, he's still heavily involved in the running of the business, which generates an estimated annual revenue of \$320 million.

What most people don't know is that Jim never wanted to be a businessman. He started mowing lawns to raise cash to fund his research for a PhD in History at La Trobe University. The uni wouldn't give him any money because, according to Jim, his ideas were "too radical, too wild."

Jim's research is concerned with the rise and fall of human civilisations. He tries to explain why certain historical events have happened to certain peoples at certain points in time. To do this, he conducts experiments on populations of rats and guinea pigs, messes with their diets and their family units, and if all goes according to plan, he'll be doing the same to humans.

Jim's been giving money, so far over \$1 million, to a team of scientists at La Trobe, to continue the research the university turned its back on three decades ago.

To put it simply, Jim has a theory that the big shifts in society (wars, revolutions, influence of religion etc.) are explainable by changes in brain and hormone activity. As an example, Jim cites WWI. According to Jim, the Great War was brought about by widespread hormonal change in the Austro-Germanic people of the 1880's, which made them more aggressive and warlike. In this way Jim can explain why Rome rose and fell, why Stalin was able to stay in power for so long and why the West is in a really bad state.

Just how he identifies these hormonal changes so many years later, and without any physical evidence, only Jim knows, but he thinks that by studying these patterns he can predict the future, and is developing a drug to change it.



Image via<sup>3</sup>

Jim's ideas are based on a scientific stream called epigenetics. Epigenetics studies the changes in genes which are not programmed into the DNA sequence. In practical terms, if a scientist (or a gardener-cum-scientist) was able to identify the link between particular genes and behaviours they could alter people's behaviour by modifying the genes. Jim sees it as the final frontier of scientific study. "For years people thought that genes were just genes, they didn't realise they could be switched on and off." And he has big plans for humanity once the drug has been developed.

"Why haven't we been visited by intelligent aliens?" He asks me a little later. "Why is that? There must be trillions of Earth-like planets across the universe, why hasn't some race gone and spread into space? And I think that one of the more plausible reasons is that when any civilisation rises past a certain stage of technology, it becomes easier and easier to destroy itself."

A lot of his initial testing has focussed on developing treatments for alcohol addiction, drug addiction, overeating and other kinds of psychological

problems. Jim thinks that a drug could be ready by as early as next year.

But Jim wants to change more than that. He wants to change people's personalities, change how they think and act, how they see the world. He believes that Jim's drug can make people more focussed, more hard working, more intelligent and creative. Basically, better humans. "It could be something as simple as a nasal spray, it could be a treatment, a drug, a pill you swallow," he says. "There are implications that this could raise IQ."

Jim envisions a society where everyone's chemical and hormonal deficiencies have been corrected, making them completely functional members of society. "Imagine if the average person is what used to be considered extremely capable, if not a genius...We could make ancient Athens look like a stodgy small town. We've never had any human society ever that has lived up to human potential."

Jim thinks that the world needs this drug. He's crunched the numbers and he has a pretty bleak outlook for this planet if he can't get his nasal spray out. In the next few years Jim predicts that the West will continue its economic and moral decline, with China taking over the reins as the big world power, followed by a few thousand years of hegemony from a unified body of African states.

By the year 4000 Jim envisions the world as a *Mad Max* style apocalyptic wasteland comprising of "poor peasant farmers where women are mutilated by cliterectomy, and this kind of garbage, which is really what the human race is headed for—poverty-stricken peasants." And Jim is doing everything in his power to stop that happening. A large percentage of the profits that he takes from Jim's Mowing go into a foundation that will continue his research and—if his theories are proven correct—save the world.

Of course, Jim is wary of the potential dangers of developing his wonder drug. He worries that it may be so powerful that it could actually bring about the apocalypse. "Technology would explode because people would become far more creative and capable by a factor of hundreds of times over. Now whether that would end up destroying the human race, or we would end up spreading out across the universe I don't know."



*Image via<sup>4</sup>*

Jim's theories have informed many elements of his personal life. Strangely, his scientific study brought him closer to God. "My theory showed

me the value of Christian beliefs such as the focus on chastity and a strong family life." Though they are no longer members, Jim and his family were part of the Church of Jesus Christ of Latter-day Saints, better known as the Mormon Church. Jim calls it as an "excellent church for building character and self-discipline." He now describes himself as an "evangelical Christian."

Jim's life is a clipped lawn of cold showers, office work, and an almost monastic moderation of his personal habits. His website says, "he has no plans to retire—ever!" He strictly regulates his consumption of his one and only vice, chocolate. Jim also abstains from sex as much as possible. "Limiting sexual behaviour is a very powerful driver of temperamental change." He nods gravely. "It makes you more driven, hard working, more focussed."

This seems incongruous when you delve deeper into Jim's family life. Since starting the business he has fathered ten children to a number of wives. I asked him how his prodigious progeny-production tallied against his dim view of sex. "Societies that have less sex have more children." He pointed to the reproductive explosion during the Victorian era as an example of this. It's not all doom and gloom in Jim's bedroom though. He begrudgingly admits, "I suppose sex has got a point in establishing relationships between husband and wife. Ideally you want to limit it though."

Jim also wrote a book. It's called *The Hungry Ape—Biology and the Fall of Civilisations* and Jim self-published it in 1992. I managed to track a copy down on Amazon, and it makes for some interesting reading. The front cover shows a photo of a gorilla superimposed over a vista of skyscrapers. Amazingly, it didn't sell many copies.

Reading *The Hungry Ape* is like stepping back in time. Jim has this idea that different races and ethnic groups have distinct "temperaments" decided by attributes he refers to as "Restraint and Vigour".

Jim believes that "Restraint is the temperamental basis of civilisation," and can account for the domination of white European ethnic groups over the past few hundred years. All of the other races have lost out because they lack either Restraint or Vigour, or sometimes both. There are lots of comparisons between black people and baboons, and even more about Jews and rats.

The book reads like a bad piece of propaganda, or a weird eugenics experiment. At best you would call *The Hungry Ape* the scientific equivalent of racial stereotyping. Here are some of the highlights:

"Jews have traditionally been far more inhibited, more driven by anxiety and insecurity... The key to their success has been high Restraint, which has been linked to their trading skills as well as hard work."

"Black sexual behaviour is freer, on average, than that of whites. Unemployment is higher and occupational success lower, reflecting, alongside racial oppression, a lack of high-Restraint work ethic and commercial skills. Rates of crime are higher, because of the reduced respect for law and authority in lower-Restraint groups."

On Aboriginals: "Unsuited in general to the discipline of academic study and of many jobs, they have become a poor-underclass. A high proportion are unemployed and the rest are in menial jobs."

Jim is concerned with altering the Restraint and Vigour of the ethnic groups that he believes have been dealt a bum hand in the epigenetic stakes. He wants to make the blacks more restrained and the Jews more vigorous, he wants to change the Aborigines personality so they can function more effectively in "our society."

"Aboriginals [sic] are hunter-gatherers," he tells me. "Their temperament is suited to that. They don't work steadily... You need people who can work hard, who can work by the clock... It's a serious question as to whether they would want to be more like us, or they should be more like us, but if they wanted to be successful in society they would have to change temperament to become more like Europeans."



*Image via<sup>5</sup>*

To Jim, racism and prejudice are not the reason why many Aboriginals around the country are unemployed, unhealthy and disenfranchised, it's because of their temperament. "It's not the prejudice that causes the problem in the temperament, it's the temperament which causes the prejudice."

Jim compares the history of the Jews, to prove his point. "They've been discriminated against, loathed, persecuted, *pogromed* [sic], murdered, forced out of home after home... By all logic they should be the most poor, downtrodden people on earth. Are they? No, they're not. Why? Because Jews are different. They have a certain temperament."

He's aware of just how un-PC his ideas are, and how they will be received, if they were ever to gain widespread attention. "People with a left-wing orientation, with a belief that all people have the same temperament, will find it hard if not impossible to grasp this stuff... like trying to hold a blob of jelly in their hands."

When I asked Jim whether his ideas were racist, he denied it saying, “I find racism particularly disgusting. My wife’s Chinese... If you were a genuine racist you would hate this book. A racist would say that Aboriginals [sic] or blacks are inferior, that they have lower intelligence, whereas I would say not at all, it’s an epigenetic change, it’s not built into the genes at all. It’s changeable.”

There’s no doubt that Jim firmly believes in what he’s doing. He sees himself as a kind of saviour, a misunderstood idealist who wants to make the world a better place. “Our civilisation has achieved a tremendous amount” he says. “I’ve got ten kids and every one of them is still alive, do you know how remarkable that is? Nobody needs to die of hunger anymore. People don’t need to live their life in mindless toil... I’d like to spread the blessings to everybody, and my theories seem to show that that’s possible.”

When we first started our correspondence he sent me the manuscript for his follow-up to *The Hungry Ape*, which he’s planning to publish sometime next year. He’s played up the scientific angle a little more in this one. Restraint and Vigour have been replaced by the terms “Q” and “Z”, but the basic premise of the theory is the same. Jim’s not sure when his drug will be ready for human consumption. He says it could take a couple of years, or it could take

a couple of decades. Whatever the case, he has the dedication and the resources to make something happen.

“I’ll be the first person to try it.” Jim grins.

From: [https://www.vice.com/en\\_us/article/jmv7g8/the-founder-of-jims-mowing-will-make-you-smarter-and-save-the-world](https://www.vice.com/en_us/article/jmv7g8/the-founder-of-jims-mowing-will-make-you-smarter-and-save-the-world)

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# TORN APART: THE VICIOUS WAR OVER YOUNG ADULT BOOKS

\* theguardian.com \* Saturday 15 June 2019 \* Leo Benedictus<sup>1</sup> \* 14 minute read \*



Authors who write about marginalised communities are facing abuse, boycotts and even death threats. What is cancel culture doing to young adult fiction?

by

Earlier this month, the author and screenwriter Gareth Roberts announced that his story was being removed from a forthcoming *Doctor Who* anthology. Having been shown Roberts's past tweets about transgender people, BBC Books said that his views "conflict with our values as a publisher". At least one of the book's other contributors, Susie Day, had promised to withdraw from the project if Roberts were included. "I raised my concerns, and said if he was in, I was out," Day said.

A few days before, at the Hay festival, the Irish author John Boyne had described a campaign against his own book, *My Brother's Name Is Jessica*,

about a boy and his trans sister. He was insulted on Twitter for his appearance and his sexuality. (Like Roberts, he is gay but not trans.) Some critics proposed a boycott of Boyne's novel, which was not withdrawn. Others made veiled threats to his safety. "I don't feel it's my job as a reader or a writer to tell anyone what they can or can't write," Boyne said. "We are supposed to use our imaginations, to put ourselves into the minds and the bodies of others."

The campaigns against Roberts and Boyne are not new, or isolated. Since March, I have been sending discreet messages to authors of young adult fiction<sup>2</sup>. I approached 24 people, in several countries, all writing in English. In total, 15 authors replied, of whom 11 agreed to talk to me, either by email or on the phone. Two subsequently withdrew, in one case following professional advice. Two have received death threats and five would only talk if I concealed their identity. This is not what normally happens when you ask writers for an interview.

But things aren't normal in YA right now. In January, a new Chinese-American author, Amélie Zhao<sup>3</sup>, withdrew her forthcoming fantasy

novel *Blood Heir*, and apologised for the way it handled slavery, which she said was based on the Asian experience, not the American one. Zhao had found an agent during a Twitter pitching event for authors from marginalised groups, but as Ellen Oh, co-founder of the campaign group We Need Diverse Books, explained in a tweet: “You are not immune to charges of racism just because you are [a person of colour]. Racism is systemic, especially anti-blackness.” Zhao described the reaction to her debut as “devastating”, and now plans to release an amended version in November.



Amélie Zhao withdrew her forthcoming fantasy novel about slavery.

Another of Zhao’s critics was Kosoko Jackson, whose own debut novel *A Place for Wolves*, about a romance between two teenage boys during the Kosovo war, was scheduled for release in March. Jackson is black and gay, and a professional sensitivity reader, which means he reads books before publication and offers advice on how they handle matters of identity. Yet on 22 February, he too was accused of insensitivity, for allegedly minimising the suffering of Albanian Muslims. “I’ve never been so disgusted in my life,” said the first review to make this

point, on the reading community website Goodreads.com. On 25 February, comments below the review began to discuss sending an open letter to Jackson’s publisher. On 28 February, he posted a note apologising to “those who I hurt with my words” and withdrew the book. In April, the British YA author Zoe Marriott was widely accused of cultural appropriation for writing a Chinese-inspired fantasy novel called *The Hand, the Eye and the Heart*.

These are just the latest battles in a war that seems to be escalating over who should control the way that people from marginalised communities appear in YA fiction. In August 2016, the Mexican-American author EE Charlton-Trujillo’s verse novel *When We Was Fierce* was delayed<sup>4</sup> after several bloggers criticised its attempt to capture the voice of a black teenager. It has still not been published, and is not mentioned on Charlton-Trujillo’s website. In the months that followed, three speculative fiction novels, *The Black Witch* by Laurie Forest, *American Heart* by Laura Moriarty and *The Continent* by Keira Drake, attracted protests for their allegedly racist content. Forest published regardless, and with great success, despite a campaign of one-star reviews and emails to her publisher. Moriarty published, too, although Kirkus magazine, which had defended *The Black Witch*, downgraded and revised its review of *American Heart*, because it said the article “fell short of meeting our standards for clarity and

sensitivity". Drake, however, was convinced by her critics, 455 of whom signed a petition demanding that *The Continent*, "a racist garbage fire" according to one fellow author, be delayed to allow "additional editorial focus". A substantially revised version appeared in March 2018.

The YA community is a much tighter group than the scattered loners who write adult fiction. "Young adult" means books suitable for readers aged 12 to 18, and the grownups who write them exhibit en masse the same idealism and energy, the defiance and conformity, and the love of social media for which teenagers are famous. Spend time weaving through the Twitter feeds of YA bloggers and authors and you'll find a supportive atmosphere for struggling writers, along with a widespread belief that the novels they produce should be good in all ways, moral and artistic. In particular, every author I've spoken to agrees that marginalised people must be represented in books more accurately and often than in the past. It is something they have more reason to care about than most, since young people on average are more liberal and less white than the general population in both the US and the UK. It is also natural to write more cautiously when about half the people reading will be children.

The YA category is still a teenager itself, with origins in the Harry Potter years at the beginning of the century. Its first big identity discussion took place in 2012, when the film of *The*

*Hunger Games* surprised some loyal but inattentive readers with the news that two of the main characters were black<sup>5</sup>. In May 2014, a new fan convention in New York called BookCon announced an all-male, all-white panel for its Blockbuster Reads event, and We Need Diverse Books<sup>6</sup> grew out of the protests that followed. In September 2015, Corinne Duyvis, a Dutch YA author, proposed the Twitter label #ownvoices to promote books in which "the protagonist and author share a marginalised identity". It has since become a kind of quality assurance mark for many campaigners, since it means that a book will help diversify both the characters and authors in YA fiction, while guaranteeing that the author knows what life with the character's identity is like. In autumn 2015, Kirkus began a policy of noting the skin colour of major characters in children's and YA books, and assigning own-voices reviewers to them. Kirkus also started to provide what it called "sensitivity training" to its reviewers. The employment of sensitivity readers became routine in US YA publishing at around the same time.



John Boyne faced criticism of his book *My Brother's Name Is Jessica*. Photograph: Murdo Macleod/The Guardian

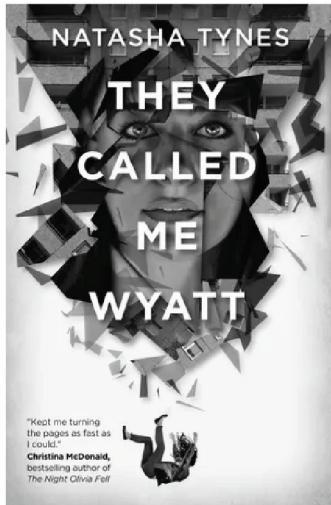
Many of the battles around YA books display the worst features of what is sometimes called “cancel culture”. Tweets condemning anyone who even reads an accused book have been shared widely. I have heard about publishers cancelling or altering books, and asking authors to issue apologies, not because either of them believed they ought to apologise, but because they feared the consequences if they didn’t. Some authors feel that it is risky even to talk in public about this subject. “It’s potentially really serious,” says someone I’ll call Alex. “You could get absolutely mobbed.” So I can’t use your real name? “I would be too nervous to say that with my name to it.” None of the big three UK publishing groups, Penguin Random House, HarperCollins or Hachette, was available for comment.

Another author I will call Chris is white, queer and disabled. Chris has generally found the YA community friendly and supportive during a career spanning several books, but something changed when they announced plans for a novel about a character from another culture. Later, Chris would discover that an angry post about the book had appeared anonymously on Tumblr, directing others to their website. At the time, Chris only knew that their blog and email were being flooded with up to 100 abusive messages a day.

“These ranged from people telling me that … I was a sick pervert for tainting [their] story with my corrupt, westernised ideas,” Chris says, “to

people saying [I] had no right to appropriate [their] experiences for [my] own benefit and I must immediately stop work. Some emails and comments consisted of just four-letter words.” There were threats of beatings and sexual assault. One message made the threat of a group “coming to my house in the middle of the night, and breaking in so that they could give me a lethal overdose”. Some messages came through Goodreads, although Chris does not know if they were linked to the main YA community. The “vast majority”, and all of the most violent threats, “came from an ideology that I would identify as left”, Chris says, and every message made the same demand. “Stop writing this. Don’t write this. You can’t write this. You’re not allowed … ”

Chris now realises that it would have been best to call the police. In fact, they told no one. The messages continued for about a year, during which time Chris stopped sleeping, found it hard to write, and became increasingly depressed. At last, from a mixture of financial necessity and the feeling that the punishment was already happening, Chris finished the book, which has since been published. The original Tumblr post remains online.



For publishers, supporting a book accused of racism could seriously harm their reputation, yet the price of withdrawing one could be enormous. “It is a topic that is discussed on a daily basis in private groups on Facebook,” says an author I will call Paris, who has twice been nominated for the Carnegie medal. “There is a huge demand for books to be more sensitive to minority groups, but there is also a concern that this censorship, pre-publication, is the wrong way to go about it.” In Paris’s case, after months of debate, an entire series was withdrawn by the publisher. “The books were literally going to print that morning,” Paris remembers. “They ended up paying for the entire series, so I got all my advances and it never got published … It was mind-boggling. Just bizarre.”

Does Paris know why they pulled it? “Because the publisher was scared of Twitter. They admitted this, because there are things like a racist character in the book. They were worried that people would say, ‘This has got a racist

character. The author must be racist.’” The publisher was certain that the books were fine, Paris says, but felt it could not risk an accusation of racism. “They are paranoid, and [the] sales [department] were second-guessing everything. They went through [the books] and went, ‘That could be misconstrued as offensive. That could be offensive. That could be offensive …’”

...

The idea that sensitivity is too subjective to understand, let alone enforce, frustrates many of those who campaign for it in the YA community. Rather than being a righteous mob trying to silence other opinions, they regard themselves as simple fact-checkers, providing a service that is welcomed by authors. “I see sensitivity reads as a form of peer review,” says one, who asked not to be identified. “There are some things as a white, cis, straight person that I may not notice or even consider. I recall a huge moment for me was reading about black ballerinas dyeing their pointe shoes to match their skin. It’s such a small thing, but I never had to think about that when I did ballet; the shoes always matched my skin.”

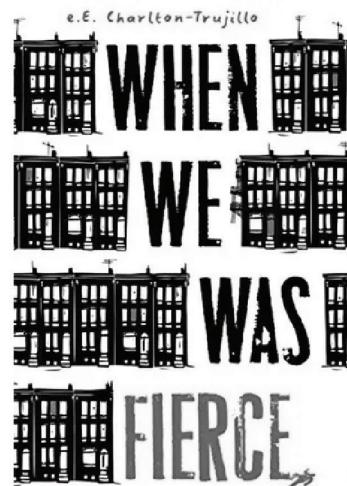
Heidi Heilig runs a YA Facebook group with more than 1,700 members. She says that the community is much more moderate and reasonable than many outsiders have been led to believe. “There is a sect of people who say, ‘Any criticism is censorship,’” she says. “There are people who say, ‘You

can only write a character from a certain race if you are of that certain race.' But a lot of the conversation falls somewhere in the middle."



'The way that things have played out this year doesn't sit comfortably for me' ... author Mary Watson.

Far from being afraid of criticism, Heilig says that many writers in her group are eager for feedback on identity matters, and many writers from marginalised groups are happy to provide it without accusing anyone of anything. None of this, of course, is seen by the outside world. "We care about our peers," Heilig says. "We don't want to drag people. That is the worst and last option. The first thing to do is try to help." Meanwhile, many mildly racist books are still published without controversy, she believes, and some of the controversy we see has an important but hidden private context. "I don't think that the fears you're talking about are borne out by reality. People make this out to be so hard, but honestly I don't think it's that difficult. What we're looking for is good writing, so you either know what the tropes are and subvert them, or break the tropes entirely. I don't understand why there's such a push to do the same old thing."



Ellen Oh has been reluctant to talk publicly since her tweets about *Blood Heir*, for which she received death threats against herself and her family. She reported the worst cases to the police, and in the end deleted her social media accounts. Criticism is healthy, Oh believes, but she feels that outsiders have made things needlessly unpleasant. "I wish we did not have these mob reactions," she says. "The YA community used to be a safe place where bloggers and writers could communicate and share book news. It's become so different ... There are extremes on both sides, and it is hard to find the truth among all the vitriol."

Mary Watson<sup>8</sup>, a mixed-race author who grew up under apartheid in South Africa and now lives in Ireland, agrees. "I think there have been many careless and even damaging representations of people of colour in books," she says, "and as a reader I've experienced it throughout my life. Sometimes it's just eye-rolling, sometimes it makes you want to shut the book in exasperation, so I

understand that there's a lot of anger about how people are represented. I absolutely get that. But the way that things have played out this year doesn't sit comfortably for me ... I absolutely agree that sloppy representation should be spoken out against, but I think this should happen in ways that encourage constructive dialogue rather than cancellation."

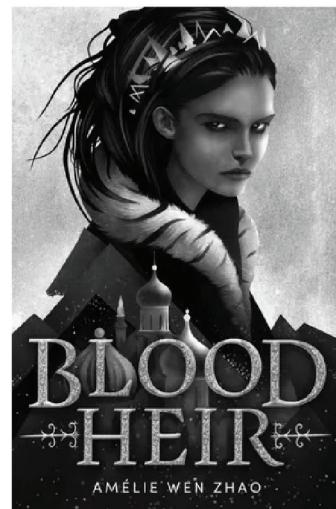
Sophia Bennett<sup>9</sup>, a British author, welcomes many of the changes in YA over the past five years, but sees a clear line that critics should not cross. "One thing that saddens me about the way that the argument is polarised on social media is how many people comment negatively, particularly, on books that they haven't read," she says. "I think that is an unhealthy attitude for a readership to have. They don't want to make up their own minds based on their own experience."

...

There are other reasons, beyond the page, why the YA community might be upset right now. According to research by Melanie Ramdarshan Bold at University College London, after a period of rapid growth in the early 2000s, the number of YA books being published in the UK peaked in 2012, since when it has declined rapidly. In 2016, the latest year in the study, just 167 different YA authors were published in the UK, less than half the number of 2012 and fewer than in any year since 2006, when the

dataset begins. Overall, sales of young adult fiction fell in the US last year, and in February the Bookseller revealed a very steep drop in UK sales, which are now at their lowest point for 11 years. There are many theories to explain this, including the idea that YA has become overloaded with social justice themes—although this was hardly a problem for

, a huge blockbuster by Angie Thomas, which concerns the shooting of a black teenager by a white police officer.



Photograph: PR

The YA wars may die out in the months ahead, as people grow weary of the arguments. Or the conflict may appear to die out, if timid publishers purge anything that they can imagine being questioned. The wars may even spread. There have been two pre-publication campaigns against adult novels on the basis of identity so far this year. A petition demanded the withdrawal of *The Cape Doctor* by EJ Levy because of the way it handles the gender<sup>11</sup> of its central character. In

May, *They Called Me Wyatt* was cancelled after its author Natasha Tynes tweeted a photograph of a black subway worker eating, against the rules, on a Washington DC train.

Tynes was widely accused of racism. At the time of writing, on Goodreads, her book has received 1,970 one-star reviews. She is now suing her publisher.

It may not be realistic to hope for restraint on social media, but it is clearly what's required. If authors are only human and make mistakes that need to be corrected, then critics are also human, and must be ready to admit some mistakes of their own. In January, Kosoko Jackson was an authority on negative tropes in fiction. In February, he was a perpetrator, as unreliable as everybody else. Heilig herself praised *A Place for Wolves* on Goodreads, then later apologised for being "flippant and disrespectful". Still, correction hurts, so it is always tempting to dismiss the "social justice warriors" or the "arrogant racists" on

the other side. Ironically, it can even happen when writers argue over how to avoid stereotypes. Nothing is more normal than being wrong.

- This article was amended on 15 June 2019 to correct the name of John Boyne's book *My Brother's Name Is Jessica*.

From: [https://www.theguardian.com  
/books/2019/jun/15/torn-apart-the  
-vicious-war-over-young-adult  
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# LE GUIN'S PLANET OF EXILE: ANTHROPOLOGICAL SPECULATIONS ON CULTURAL DIFFERENCE AND LOSS

\* tor.com \* Wednesday 17 June 2020 \* Sean Guynes<sup>1</sup> \* 13 minute read \*

A biweekly series, The Ursula K. Le Guin Reread explores anew the transformative writing, exciting worlds, and radical stories that changed countless lives. This week we'll be covering *Planet of Exile*<sup>2</sup>, first published by Ace Books in 1966. My edition is part of a three-book collection Nelson Doubleday, 1978, and this installment of the reread covers the entire novel.

Among those who care about these things, there are (at least) two ways to divide science fiction. On the one hand we have hard science fiction, with its emphasis on extrapolating futures and possibilities from “real science,” from (exo)biology, (quantum) physics, geology, chemistry, etc. On the other hand, there’s soft science fiction and its supposedly contrasting emphasis on the less-serious, non-natural sciences: sociology, anthropology, linguistics, psychology, and so on.

This is a distinction that, whether you care about it or give it any shrift, has held considerable sway in the writing, publishing, and marketing of science fiction since the genre’s beginnings out of purported attempts to imagine real-world, near-future technologies in the pages of Hugo Gernsback’s pulps. In broad terms, the distinction between hard and soft science fiction has painted entire eras of the genre’s history, so that it is possible to imagine genre trends in science fiction as a pendulum caught between the gravitational forces of Science and science, the “real” (chemical building blocks, machinery, jet propulsion) and the social/cultural (gender, political systems, class).

Of course, look at any attempt to taxonomize genre and it breaks down; after all, what is *Star Wars*? (I’ll kindly look the other way as you blast your answers; if there were any answer other than the conversation *about* the answers, the example wouldn’t be useful). But painting in the broad strokes that are sometime quite

useful, folks tend to agree that science fiction of the 1960s and 1970s—the *New Wave!*—forsook the hard-science-fictive, exploration-thirsty techno-fetishistic optimism of the Golden Age and instead turned it inside out. From launching outward to colonize the stars, authors turned to diving inward in an effort to understand who we are—who it is we've spent decades fantasizing about sending into space, to other planets, to liaise with alien babes and fight bug-eyed monsters.

We've inherited this easy gloss of the differences between the New Wave and its predecessor(s) partly because that's what the New Wavers said; we took their word and made it history<sup>3</sup> (ironic, given the book at hand). But it's a difference without much of a distinction, made painfully clear in the very many novels of the 1950s, for example, concerned with the expansion of American capital and empire. Still, this (imagined) difference helped to establish authors like Ursula K. Le Guin, who was seen by contemporaries not only as a better writer than predecessors (and she was!) but as someone who could make a discipline like anthropology relevant to the extrapolations of science fiction.

Le Guin certainly deserves the distinction of being a founding writer of “anthropological science fiction,” though she was preceded briefly by actual anthropologist Chad Oliver (neither a great nor inventive writer) in the 1950s. Le Guin’s father was a

famous anthropologist in part because of his association with Ishi, the “last Yahi Indian” of northern California. Her father’s work and relationship in particular with Ishi hangs heavily over Le Guin’s writing over the decades—something I’ll explore later in my reread of *Always Coming Home* (1985). Indeed, Le Guin’s science fiction seems to almost always be an attempt to grapple with the genre as a tool for exploring what it means to be human, for cultures (and human bodies) to adapt to new circumstances of life across the galaxy, and for these cultures to come into contact. Science fiction loves to tell tales of alien contact; anthropology is a discipline founded on the idea of what we do when we come in contact with others who aren’t like “us.” And Le Guin is pretty explicit about this from the beginning of the Hainish cycle, a series of stories we might as well subtitle “Tales of the Bureau of American Ethnology<sup>5</sup>—in Space!”

Of the Hainish novels we’ve read so far, *Rocannon’s World* and *The Left Hand of Darkness* are the most obviously ethnography: they both feature HILFer/Ekumen agents sent to a planet in order to learn the culture (i.e. as anthropologists), produce data for the League/Elumen about the culture (i.e. an ethnography), and eventually play an ambassadorial role between League/Ekumen and indigenous people (there’s no clear 1:1 in anthropology, though many times anthropologists served unofficially as representatives both of indigenous

peoples to government forces, and vice versa; E.E. Evans-Pritchard<sup>6</sup>, for example, operated as both soldier and anthropologist in Africa, even raising local troops from among those he had studied).

Le Guin's second novel, *Planet of Exile*, is a chronological sequel in the Hainish cycle to *Rocannon's World* and was also published as an Ace double (this time with New Waver Thomas M. Disch's *Mankind Under the Leash*). *Planet of Exile* takes a somewhat different approach to the survey and study of the indigenous population than *Rocannon's World*, blending the idea of an ethnological study with the premise of a "lost colony" in a fascinating story that addresses cultural difference, exilic loss, knowledge keeping, and more.

The planet is Werel, also known as Alterra. The planet's seasonal cycles are quite extended, with time being measured by days (approximate to ours), moonphases (lasting 400 days), seasons (roughly 15 moonphases), and Years (lasting 4 seasons). A Year on Werel is 60 years, and children are typically born in seasonal cycles, with few children born in winter. Winter on Werel is, not unlike in George R.R. Martin's *A Song of Fire and Ice*, brutal and lengthy. Thus, the people of Werel spend the 45 moonphases of spring, summer, and fall growing and storing crops in order to survive the harsh 15 moonphases of ice and snow.

On Werel there dwells a subspecies of human long ago seeded on the planet—as all humans in the Hainish cycle were—by the Hain. These humans, who call themselves "man," are technologically uncomplicated, practicing lifeways akin to *Homo sapiens* of the Neolithic era, including the implementation of agriculture and animal domestication, seasonal dwelling in cities built from mud bricks, and a kinship-based organization into ethnic groups. They have some artistic capability, they recognize the authority of male elders (chiefs), and they form sexual-marital relationships in a polygamous-patriarchal pattern. *Planet of Exile* takes place during the transition days between fall and winter, and during an historical moment that is witnessing the rise of an early multi-state empire forged by the violent Gaal people of the Southing.

The indigenous Werelians (Le Guin doesn't really give us a word for these inhabitants in *Planet of Exile*) live alongside the "farborn," whom they call "unman," and who are the descendants of a colonizing group of Hainish who were abandoned on Werel 10 Years ago when their ship (and ansible with it) returned to Hain in order to help fight what is described in *Rocannon's World* as the War to Come. Left on Werel for 600 Hain-years, the thousands of original colonists have dwindled in population, become inbred and isolated, and retreated with their

remaining hundreds of survivors to one city on the coast nearby to the winter-city of the Tevar people.

Calling themselves “man” but referred to generally as the Alterrans after the name for their leaders, these humans enjoy permanent housing, indoor plumbing and heating, electronics, and other amenities of life familiar to spacefaring people. Yet they have no major advanced machinery, such as planes or spaceships, as these returned to Hain for the war effort. Moreover, after 600 Hain-years, the Alterrans have largely lost complete understanding of the knowledge of the League of All Worlds left to them by their ancestors, such that many things they do know—whether cultural, legal, or scientific—are learned by rote and enacted with ritualistic deference. Like the Werelians, the Alterrans consider themselves “truly” human, look down on the cohabiting species, and treat the other as idiotic barbarians.

This, in short, is an ethnographic overview of the Werel when *Planet of Exile* opens. I highlight these cultural and political details because they are, in essence, the building blocks of a science fiction storyworld. It is not only the characters—for example, the League/Ekumen agents, who perform ethnographic missions and bring back knowledge to others—but it’s also Le Guin herself who acts through her writing as an ethnographer, recording cultural differences and using the

discipline of anthropology as a toolkit to construct fascinating what-ifs, what-thens, and how-sos.

These are the sort of details many writers begin with, and too often (sadly) beyond which few progress, as if the mere detailing of a storyworld were the thing that mattered in storytelling. For some, it may be; I know from my own experience that I dove into Tolkien and *D&D* and *Star Wars* novels more out of a desire to “know” all the “facts” about the worlds they imagined than for any other reason. I even complained a bit that *Rocannon’s World* was a series of Tolkiennesque facts with a basic plot dressing. *Planet of Exile*, however, is a fun, passionate novel that begins to show Le Guin’s wonderful facility with blending world and story, ethnography and craft. While I would honestly not recommend *Rocannon’s World* to anyone except the most die-hard completionists, *Planet of Exile* is a fascinating look into the author as she developed her oeuvre.

So, if it’s more than just good anthropological science fiction worldbuilding, what is *Planet of Exile* about? The TL;DR version is it’s a Pocahontas-type story in which a colonizer falls in love with a young, bull-headed indigenous woman to the detriment of her family relations and his people’s trust in him as leader. He is Agat, she is Rolery. He is the Alterrann leader and she the granddaughter of the Tevar chief, Wold. Thankfully, Wold is an odd-one-out among the Werelians, since one of

his five wives was a farborn. Things don't go as poorly for Agat and Rolery as they could, though at least one guy gets killed in a ritualistic honor-duel over whether a Werelian can marry an Alterrann. The intercultural love story emphasizes how special and unique Rolery is, how she has the natural ability to mindspeak when no Werelian has ever learned, and so on. Agat is...well, he's an exotic guy who noticed Rolery and he happens to be really passionate about her. That's it. That's the story.

But as a backdrop, Le Guin gives us a saga of the development of a Neolithic empire. The drama? Winter is coming (I see you, George!), the Tevar have yet to finish building their mud-brick winter-city, and a huge Gaal army of thousands is marching South. Already they have conquered multiple winter-cities and established control over the territory of other ethnic groups, killing off the men and leaving garrisons behind to ensure cooperation of the women and children whose lands they annex. This is the beginning of the consolidation of power as it played out among Neolithic groups in the Near East, Africa, Europe, Asia, and the Americas several thousand years ago. The events of Rolery and Agat's love, from their meeting in his city as she boldly explores farborn territory to his bedding of her days later in a forest, to their eventual passionate reunion following the siege of the Alterrann city, unfolds as the Gaal

invade, make refugees of the Tevar, and are eventually repelled by the Alterranns.

The story in itself is not particularly unique, though I personally find it thrilling how Le Guin works through that moment of epistemic break when the first multi-state empire emerges, throwing political and cultural life as it has been practiced for thousands of years into sudden chaos. Le Guin was familiar with the effects of such major, history-altering changes, not only because her father, like many white anthropologists of the early 1900s, felt guilty and saddened by the genocide of indigenous peoples (with all the usual effectiveness of white guilt<sup>7</sup>). Much of her science fiction deals with how historic events shape and change how humans live. *Planet of Exile* is about the closest we get to Le Guin writing *The Clan of the Cave Bear*. All of this is well and good, but what else is going on?

Exile, exploration, and ethics—three themes among many, and easily the guiding themes, of Le Guin's Hainish cycle. If the unassuming novel *Rocannon's World* was an exploration of how a man exiled on an alien planet by the distances of space travel survives, how he sacrifices his own ability to rejoin his people, in order to save both a planet and the League of All Worlds, Le Guin's second novel develops the idea of exile more explicitly. Here she makes it a function of human/Hainish/League exploration of the cosmos. While the Alterranns are not exiled in the

traditional sense of having been forced out of their land (they seemingly willingly left Hain in order to set up a colony on Werel), they are exiled in the sense that they are separated unwillingly from and can never return to their people.

What's more, these Alterrans live some 600 years later in the houses and bodies made for another world, with knowledge that is completely decontextualized and bears little meaning without its attachments to the meaning-making systems of the Hain. They are both a diasporic people, unable to return to the (now mythic) homeland, as well as internal exiles, living lives bereft of full meaning. The Alterrans can also mindspeak with one another, which leads the Werelians to view them as witches. They are an enclave, a dwindling population, inbred and demoralized, waning away on a distant planet seemingly forgotten by the people they believe they belong to.

For the late 1960s, this must certainly have been a powerful feeling, especially for young hippies, New Lefties, and countercultural malcontents looking for meaning in a world created by grumpy elders with no interest in the youths. The Alterrans, like their real-world counterparts, live in malaise, but as history shifts around them, they are not passive recipients—they become agents of change, bringing together Alterrans and Werelians, beating back the Gaals. And for the first time in 600 Hain-years, they become sick. As an

Alterrann doctor describes it to Rolery, it means that the Alterrans have finally begun to "adapt" to the molecular differences of life on a completely alien planet.

Where before unity between the farborns and indigenous people (the end goal of the League of All Worlds) was a seeming impossibility—both because of the inability of them to bear the others' children, but also because of each culture's taboos against relationships together—the changing historical parameters of life for the Alterrans and Tevar, as well as the new biological possibilities of union, present a possible end to exile. A possible beginning. Not a comfortable one, nor one without power imbalances... But a beginning.



Le Guin's *Planet of Exile* is a fascinating little novel, certainly worth the few hours (if you're a slow reader like me) it takes to absorb. Rarely does a novel so clearly show the author-in-development, the author becoming who she is best remembered as. *Planet of Exile* is that rare novel. It is also somewhat thrilling in that it follows Le Guin's pattern, as in the prologue to *Rocannon's World*, of providing an indigenous perspective on modern technologies, playing on notions of normalcy in a move that was key to anthropology for most of the twentieth century: to make familiar the exotic, to exoticize the familiar. Thus, we read of iron reeds from

which water flows when a flower is turned, or small walls made of clear stone set into walls of regular stone, and so on. While the usefulness of such defamiliarizing techniques in anthropology is debatable, there's no doubt that it can be a powerful tool for thinking about why we do what we do, and think what we think. It's as if Le Guin is channeling a well-known satirical piece from an anthropology journal c. 1956, Horace Miner's "Body Ritual among the Nacirema<sup>8</sup>" (check it out if you haven't read it; it's quite fun).

This is the Hainish cycle in a nutshell: a project of defamiliarizing what it means to be human, what culture is and can be. It may not always be as radical as, say, *The Dispossessed*, but

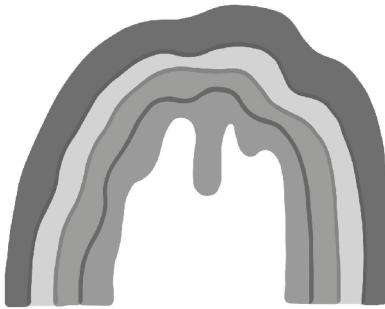
it is wildly, pleasantly transformative. Join me in two weeks, on July 1, as we continue our journey into Le Guin's archives of the imagination. Be seeing you!

From: <https://www.tor.com/2020/06/17/le-guins-planet-of-exile-anthropological-speculations-on-cultural-difference-and-loss/>

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# THE 2010S WERE THE END OF NORMAL

\* nytimes.com \* Friday 27 December 2019 \* Michiko Kakutani<sup>1</sup> \* 13 minute read \*



Tim Lahan *Tim Lahan*

By

Michiko Kakutani<sup>1</sup>

Ms. Kakutani is a former book critic for The Times.

Dec. 27, 2019

**Two of the most widely quoted** and shared poems in the closing years of this decade were William Butler Yeats's “The Second Coming”<sup>2</sup> (“Things fall apart; the centre cannot hold”), and W.H. Auden’s “September 1, 1939”<sup>3</sup> (“Waves of anger and fear / Circulate over the bright / And darkened lands of the earth”). Yeats’s poem, written just after World War I, spoke of a time when “The best lack all conviction, while the worst / Are full of passionate intensity.” Auden’s poem, written in the wake of Germany’s invasion of Poland, described a world lying “in stupor,” as democracy was threatened and “the enlightenment driven away.”

Apocalypse is not yet upon our world as the 2010s draw to an end, but there are portents of disorder. The hopes nourished during the opening years of the decade—hopes that America was on a progressive path toward growing equality and freedom, hopes that technology held answers to some of our most pressing problems—have given way, with what feels like head-swiveling speed, to a dark and divisive new era. Fear and distrust are ascendant now. At home, hate-crime violence reached a 16-year high in 2018<sup>4</sup>, the F.B.I. reported. Abroad, there were big geopolitical shifts. With the rise of nationalist movements and a backlash against globalization on both sides of the Atlantic, the liberal post-World War II order—based on economic integration and international institutions—began to unravel, and since 2017, the United States has not only abdicated its role as a stabilizing leader on the global stage, but is also sowing unpredictability and chaos abroad.

A 2019 Freedom House report<sup>5</sup>, which recorded global declines in political rights and civil liberties over the last 13 years, found that “challenges to American democracy are testing the stability of its constitutional system

and threatening to undermine political rights and civil liberties worldwide.”

If Lin-Manuel Miranda’s dazzling 2015 musical “Hamilton,” about the founders’ Enlightenment vision of the United States, embodied the hopes and diversity of America during the Obama years, dystopian fables and horror-driven films and television series—including “Black Mirror” (2016), a rebooted “Twilight Zone” (2019), “Joker” (2019), “Get Out” (2017), “Watchmen” (2019), “The Handmaid’s Tale” (2017) and “Westworld” (2016)—spoke to the darkening mood in the second half of the decade, as drug overdose deaths in America rose to nearly half a million<sup>6</sup> by the decade’s end, life expectancy fell<sup>7</sup> in the United States and Britain, and many of us started to realize<sup>8</sup> that our data (tracking everything we viewed, bought and searched for online) was being sold and commodified, and that algorithms were shaping our lives in untold ways. In what was likely the hottest decade on record, scientists warned that climate change was swiftly approaching<sup>9</sup> a “point of no return”; we learned that glaciers were melting<sup>10</sup> at record speed at the top of the world; and fires ravaged California and Australia and threatened the very future of the Amazon rainforest.

Many of these troubling developments didn’t happen overnight. Even today’s poisonous political partisanship has been brewing for decades—dating back at least to Newt Gingrich’s insurgency—but President Trump has

blown any idea of “normal” to smithereens, brazenly trampling constitutional rules, America’s founding ideals and virtually every norm of common decency and civil discourse.

The biggest casualty of the decade was trust. According to a Pew survey earlier this year, only 17 percent of Americans<sup>11</sup> trust the government to do what is right “most of the time” or “just about always.” America’s reputation tumbled even further on the world stage: A 2018 Pew survey of 25 countries found<sup>12</sup> that 70 percent of respondents said they lack confidence that the American president would make the right foreign policy moves. Between the end of President Barack Obama’s second term and late 2018, positive views of America fell<sup>13</sup> 27 percentage points in Germany, 26 points in Canada, and 25 points in France. As with many things, Donald Trump is both a symptom and a radical accelerant of the decline in trust. While exploiting the anger at the establishment that snowballed around the world in response to the 2008 financial crisis, Mr. Trump has also cruelly amplified existing divisions and resentments in America, fueling suspicion of immigrants and minorities and injecting white nationalist views into the mainstream, in efforts to gin up his base.

Mr. Trump’s improbable rise benefited from a perfect storm of larger economic, social and demographic changes, and the profoundly disruptive effects of new

technology. His ascent also coincided with the rising anxieties and sense of dislocation produced by such tectonic shifts. Around the world, liberal democracy is facing grave new challenges, authoritarianism is on the rise and science is being questioned<sup>14</sup> by “post-fact” politicians. Echoes of Mr. Trump’s nativist populism can be found in Prime Minister Boris Johnson of Britain’s recent electoral victory and the Brexit referendum of 2016, and in the ascent of the far-right President Jair Bolsonaro of Brazil. Democracy is under threat in Hungary and Poland. Once fringe right-wing parties with openly racist agendas are rebranding themselves in Sweden and Belgium. And far-right groups in Germany and Spain are now the third-largest parties in those nations’ parliaments.



Illustration by The New York Times. Photograph by Doug Mills/The New York Times *Illustration The New York Times. Photograph Doug Mills/The New York Times*

**At the same time**, Donald Trump remains a uniquely American phenomenon. Although the United States was founded on the Enlightenment values of reason, liberty and progress, there has long been another strain of thinking at work beneath the surface—what

Philip Roth called<sup>15</sup> “the indigenous American berserk,” and the historian Richard Hofstadter famously described<sup>16</sup> as “the paranoid style.”

It’s an outlook characterized by a sense of “heated exaggeration, suspiciousness, and conspiratorial fantasy,” Hofstadter wrote in his 1964 essay, and focused on perceived threats to “a nation, a culture, a way of life.” Its language is apocalyptic (Mr. Trump’s “American carnage” is a perfect example); its point of view, extremist. It regards its opponents as evil and ubiquitous, while portraying itself, in Hofstadter’s words, as “manning the barricades of civilization.”

The “paranoid style,” Hofstadter observed, tends to occur in “episodic waves.” The modern right wing, he wrote, feels dispossessed: “America has been largely taken away from them and their kind, though they are determined to try to repossess it.” In their view, “the old American virtues have already been eaten away by cosmopolitans and intellectuals,” and national independence has been “destroyed by treasonous plots, having as their most powerful agents not merely outsiders and foreigners but major statesmen seated at the very centers of American power.”

One well-known eruption of the “paranoid style” occurred in the 1950s with the anti-Communist hysteria led by Joseph McCarthy. It would surface again in the 1960s with the emergence on the national stage of George C.

Wallace, who ran a presidential campaign fueled by racism and white working-class rage.

In his 2018 book “The Soul of America,” the historian Jon Meacham also wrote about the cycles of hope and fear in American history, emphasizing the role that presidents play in setting a tone for the country and defining—or undermining—its founding ideals. He wrote about presidents who have worked to unify the country and appeal to what Abraham Lincoln called “the better angels of our nature,” and those who have courted discord and division.

Lincoln was followed in office by his vice president Andrew Johnson, a champion of white supremacy who pardoned more than 7,000 Confederates and opposed the 14<sup>th</sup> Amendment. Johnson was impeached in 1868<sup>17</sup>: And while he was not convicted in the Senate, the historian Brenda Wineapple argues, the House’s decision to impeach him implied “the glimmering hope of a better time coming, a better government, a fairer and more just one” down the road in the years to come.



Illustration by The New York Times. Photograph by Marcus Yam for The New York Times. Illustration The New York Times. Photograph Marcus Yam for The New York Times

**Mr. Meacham notes** that “extremism, racism, nativism, and isolationism, driven by fear of the unknown, tend to spike in periods of economic and social stress.” Periods, that is, like our own, when change of every sort is blowing across the globe.

The event that turned people’s sense of dislocation and disillusionment into populist anger on both the right (the Tea Party) and the left (Occupy Wall Street and, later, Bernie Sanders’s candidacy) was the 2008 financial crisis. Trust in government had been in sharp decline in previous decades—driven by Watergate and Vietnam in the 1970s, and more recently by the invasion of Iraq and the failure to find weapons of mass destruction there, and by frustration with worsening partisan gridlock in Washington. But the lingering fallout of the 2008 crash—growing income inequality, declining social mobility and dwindling job security—ignited rage against the elites and the status quo.

While the banks were bailed out and the fortunate 1 percent soon made back its losses (and more), working- and middle-class voters struggled to make up lost ground. Many students realized they were looking at jobs in the gig economy and years of crippling debt, while workers in the manufacturing sector found themselves downsized or out of work. As a candidate, Mr. Trump sold himself as the champion of such voters—whom he called “the forgotten men and women”—and he promised to “drain the swamp” in Washington. But once in office, he enlarged the swamp, hiring some 281 lobbyists, and set about cutting taxes for corporations and the very rich.

He also began a war on the institutions that were the very pillars of the government he now headed. In early 2017, Mr. Trump’s then adviser and strategist Steve Bannon vowed that the administration would wage a tireless battle for the “deconstruction of the administrative state<sup>18</sup>” and the administration has done so ever since—nihilistically trying to undermine public faith in the efficacy, the professionalism, even the mission of the institutions that are crucial for guarding our national security, negotiating with foreign governments and ensuring the safety of our environment and workplaces. Mr. Trump also launched chilling attacks on those he reviled—from the F.B.I. to the judiciary—for having failed to put loyalty to him ahead of loyalty to the Constitution.

This is familiar behavior among authoritarians and would-be dictators, who resent constitutional checks and balances, and who want to make themselves the sole arbiters of truth and reality. A reporter said that in 2016 when she asked Mr. Trump why he continually assailed the press, he replied<sup>19</sup>: “I do it to discredit you all and demean you all so when you write negative stories about me, no one will believe you.” It was fitting, then, that in January 2017, the month of his inauguration, George Orwell’s classic novel “1984” shot to the top of best-seller lists. The nearly 70-year-old novel suddenly felt unbearably timely<sup>20</sup> with its depiction of a world in which the truth is whatever Big Brother says it is.

One of the terrible ironies of Mr. Trump’s presidency is that his administration’s dysfunction—little to no policymaking process on many issues, impulsive decision-making, contempt for expertise and plunging morale at beleaguered agencies—creates a toxic feedback loop that further undermines public trust in the government and lends momentum to his desire to eviscerate the “deep state.” The conflicts of interest that swirl around Mr. Trump and his cronies further increase the public’s perception of corruption and unfairness.



Illustration by The New York Times. Photograph by Lawrence Jackson for The New York Times. Illustration by The New York Times. Photograph by Lawrence Jackson for The New York Times

**Meanwhile, tectonic shifts** were occurring in technology: Not just game-changing developments in artificial intelligence, genetic research and space exploration, but also new platforms, apps and gadgets that almost immediately altered people's daily habits, including Instagram (2010), Snapchat (2011), the iPad (2010), Uber (2009), and digital assistants Siri (2011) and Alexa (2014). In these years, we also developed a growing appreciation of technology's dark side: Gamergate<sup>21</sup>, N.S.A. surveillance, Russian attacks on our elections, the fear that you might not only lose your job to a stranger on the other side of the planet, but also to robots in your hometown.

In the 2010s, we also became addicted to podcasts, and binge-watching became a thing. In fact, immersion or escape into compelling fictional worlds seemed to be one strategy people were embracing to cope with political outrage fatigue. Perhaps this also explains why nostalgia became so popular in the 2010s with reboots and returns of old television shows like

"Mad About You," "Twin Peaks," "The X-Files," "Dynasty," "Lost in Space," "Roseanne," "Will & Grace," "Gilmore Girls" and "The Odd Couple"—a phenomenon that's both a reflection of the retro-mania catalyzed by the endless availability of old content on the web and a longing for older, saner times.

With his calls to "Make America Great Again," Mr. Trump appealed to a different sort of nostalgia—for an era when white men were in charge and women, African Americans, Hispanics and immigrants knew their place.

At the same time, Mr. Trump and his campaign revived the culture wars of the 1960s and '70s, and politicized everything from football and Starbucks coffee cups (criticized by some evangelicals for being too secular and part of the "war on Christmas") to plastic straws and windmills. It might have been funny if we were living in a satirical novel, not in the real world with a former reality TV star as president.

In his insightful forthcoming book, "Why We're Polarized," Ezra Klein observes that "our partisan identities have merged with our racial, religious, geographic, ideological, and cultural identities." This is coming at a moment when the nation's demographics are rapidly changing—census statistics project<sup>22</sup> that America will become "minority white" in 2045—and putting more emphasis than ever on questions of identity. Our

political identities have become so crucial to us, Mr. Klein writes, that “we will justify almost anything or anyone so long as it helps our side, and the result is a politics devoid of guardrails, standards, persuasion, or accountability.”

It’s a measure of just how partisan our politics has become that most Republicans now reflexively support Mr. Trump—despite broken promises, ballooning deficits, and tariffs that have hurt Americans, never mind the astonishing volume of lies he emits. Many Trump supporters inhabit a soundproofed echo chamber: A 2017 study, published in the *Columbia Journalism Review*<sup>23</sup>, found that pro-Trump audiences got most of their information from an insulated media system, anchored around Breitbart News, that reinforced “the shared worldview of readers” and shielded “them from journalism that challenged it.”

No surprise, then, that the president’s hard-core supporters stubbornly repeat the lies and conspiracy theories that cycle through his Twitter feed, connecting him<sup>24</sup> with Russian trolls, white nationalists and random crackpots, or that Mr. Trump’s assertions and fictional narratives are amplified further by Republican politicians and the right-wing media noise machine.

Social media, which came into its own in the 2010s, accelerated the filter bubble effect further, as algorithms designed to maximize user

“engagement” (and therefore maximize ad revenues) fed people customized data and ads that tended to reinforce their existing beliefs and interests. This is why Republicans and Democrats, conservatives and liberals, increasingly have trouble even agreeing upon shared facts—a development that has undermined trust between different groups, fueled incivility and sped up the nicheification of culture that began years ago with the advent of cable television and the internet.

In addition, platforms like Facebook, Twitter and Instagram have enabled politicians (as well as advertisers, Russian agents and alt-right conspiracy theorists) to circumvent gatekeepers like the mainstream media and reach out directly to voters. “Influencers” replaced experts, scientists and scholars; memes and misinformation started to displace facts. As the news cycle spun faster and faster, our brains struggled to cope with the flood of data and distraction that endlessly spilled from our phones. And in an era of data overload and short attention spans, it’s not the most reliable, trustworthy material that goes viral—it’s the loudest voices, the angriest, most outrageous posts that get clicked and shared.

Without reliable information, citizens cannot make informed decisions about the issues of the day, and we cannot hold politicians to account. Without commonly agreed upon facts, we cannot have reasoned debates with

other voters and instead become susceptible to the fear-mongering of demagogues. When politicians constantly lie, overwhelming and exhausting us while insinuating that everyone is dishonest and corrupt, the danger is that we grow so weary and cynical that we withdraw from civic engagement. And if we fail to engage in the political process—or reflexively support the individual from “our” party while reflexively dismissing the views of others—then we are abdicating common sense and our responsibility as citizens.

In his wise and astonishingly prescient “Farewell Address,” from 1796, George Washington spoke of the dangers<sup>25</sup> he saw the young new nation facing in the future. He warned against “the insidious wiles of foreign influence,” “the impostures of pretended patriotism,” and, most insistently, of “the baneful effects of the spirit of party”—imploring his fellow citizens not to let partisan or geographic differences plant seeds of mistrust among those who “ought to be bound together by fraternal affection.”

Every portion of the country, he wrote, should remember: “You have in a common cause fought and triumphed together; the independence and liberty you possess are the work of joint counsels, and joint efforts of common dangers, sufferings, and successes.” Citizens, he urged, must indignantly frown “upon the first dawning of every attempt to alienate any portion of our

country from the rest, or to enfeeble the sacred ties which now link together the various parts.”

Michiko Kakutani ([@michikokakutani<sup>26</sup>](#)) is the author of “The Death of Truth: Notes on Falsehood in the Age of Trump<sup>27</sup>.”

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From: <https://www.nytimes.com/interactive/2019/12/27/opinion/sunday/2010s-america-trump.html>

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# N. K. JEMISIN'S DREAM WORLDS

\* newyorker.com \* Monday 20 January 2020 \* Raffi Khatchadourian<sup>1</sup> \* 30 minute read \*

Several years ago, N. K. Jemisin, the fantasy and science-fiction author, had a dream that shook her. In her sleep, she found herself standing in a surreal tableau with a massif floating in the distance. “It was a chunk of rock shaped like a volcanic cone—a cone-shaped smoking mountain,” she recalled. Standing before the formation was a black woman in her mid-forties, with dreadlocks, who appeared to be holding the volcano aloft with her mind. She was glaring down at Jemisin and radiating anger. Jemisin did not know how she had triggered the woman’s fury, but she believed that, if she did not ameliorate it quickly, the woman would hurl the smoldering massif at her.

Jemisin awoke in a sweat and jotted down what she had seen. “I need to know how that person became who she is—a woman so angry that she was willing to move mountains,” she told me. “She was angry in a slow burn, with the kind of anger that is righteous, enough to change a planet. That’s a person who has been through so much shit that she has been pushed into becoming a leader. That’s an M.L.K. I needed to build a world that would explain her.”

Jemisin’s writing process often begins with dreams: imagery vivid enough to hang on into wakefulness. She does

not so much mine them for insight as treat them as portals to hidden worlds. Her tendency is to interrogate what she sees with if/then questions, until her field of vision widens enough for her to glimpse a landscape that can hold a narrative. The inspiration for her début novel, “The Hundred Thousand Kingdoms” (2010), was a dream vision of two gods. One had dark-as-night hair that contained a starry cosmos of infinite depth; the other, in a child’s body, manipulated planets like toys. From these images, Jemisin spun out a four-hundred-page story about an empire that enslaves its deities. The book established her as a prominent new voice.

Jemisin is black, in her mid-forties, and wears her hair in dreadlocks. In her author photo, she gazes sternly at the camera, as if ready for literary combat. In person, she is much warmer, but she likes the picture. Typically, at the center of her fiction, there is a character with coiled strength. Jemisin, who has a degree in psychology, is interested in power and in systems of subjugation. In her books, the oppressed often possess an enormous capacity for agency—a supernatural ability, even, that their oppressors lack—but they exist in a society that has been engineered to

hold them down. Eventually, the world is reordered, often with a cataclysm.

The notes that Jemisin jotted down after her dream went into a folder on her computer where she stores “snippets, ideas, random thoughts.” Some are drawn from her reading of nonfiction: Jared Diamond’s “Collapse,” Charles Mann’s “1491,” Alan Weisman’s “The World Without Us.” Eventually, she told me, “this fragment pairs up with that fragment, and they form a Voltron, and become a story.” (Voltron is an anime “super robot” that emerges when other machines combine—an artifact of eighties television that Jemisin enjoyed as a girl.)

Another file in the folder was from 2009, when Jemisin attended a *NASA*-funded workshop, called Launchpad, where participants discussed what Earth might be like if it lost its moon. Some speculated that our planet’s axis would tilt wildly, triggering haphazard ice ages, and that its core might lose its stability, causing earthquakes and volcanic eruptions. The fragments in Jemisin’s folder began to pair up. She imagined a planet that had lost its moon and become seismically hyperactive. Such a place, she reasoned, could sustain life, but just barely; mass extinctions would be common. If the woman in her dream inhabited that planet, she wondered, then what would her civilization look like?

J. R. R. Tolkien once argued that the creation of an imaginary world was the highest form of artistic expression, but that it was also easily undervalued. If it is done well, much of the labor remains off the page. Before Tolkien wrote “The Lord of the Rings,” he invented a mythology, a history, and even languages for Middle-earth; he explained to a friend, “I wisely started with a map, and made the story fit (generally with meticulous care for distances). The other way about lands one in confusions and impossibilities.” It annoyed him that people “stupidly and even maliciously confound Fantasy with Dreaming, in which there is no Art.” He wrote about elves. He wanted to be taken seriously, too.

Jemisin has no interest in pseudo-medieval Europe, but Tolkien would have recognized her rigor. To get a firsthand feel for volcanoes, she flew to Hawaii to smell sulfur and ash. To learn how people prepared for environmental stress, she researched end-of-days survivalists, though she stopped short of going into the wilderness to meet them. (“I wasn’t stupid,” she told me.)

As the idea of an ever-shattering planet developed in her imagination, Jemisin drew a map of a Pangaea-like supercontinent, which she wryly called the Stillness. She reasoned that its wealth would be concentrated in an urban center near the equator, at a geological spot that seemed stable, based on fault lines that she had sketched out. She decided arbitrarily

that the woman in her dream lived in the volatile hinterlands—and then began to treat that decision like a discovered fact. “I’m, like, O.K., why isn’t she working to stabilize this powerful, wealthy part of society?” Jemisin told me. “Well, she must have at one point been part of that life, but somehow got away.” Gradually, the contours of a story emerged. “You let intuition do whatever it is going to do,” she said. “I had a sentence in mind: ‘Let’s start with the end of the world.’ That can mean the literal end of the world, it can mean the end of a civilization, or it can mean grief. That was the point where I decided that her son had died.” The grief she understood. Jemisin’s mother had become ill, and would not survive the decade.

After immersing herself in the Stillness for four years, Jemisin finished “The Fifth Season.” The story defied easy literary categorization. It was sweeping but intimate, multilayered but simply told. It could be read as an environmental parable, or as a study of repression, or as a meditation on race, or as a mother’s post-apocalyptic quest. Jemisin wove in magical elements, but she systematized them so thoroughly that they felt like scientific principles—laws of an alternative nature. She evoked advanced technology, but made it so esoteric that it seemed like magic. (Most of her imagined machines were made of crystal. At some point, the inhabitants of the

Stillness eschewed metallurgy; the word “rust” even became an expletive.)

She took stylistic chances, too. “The Fifth Season” at first appears to weave together the stories of three people, but late in the book Jemisin reveals that she has merely shattered her protagonist’s story into three narratives, a formal echo of her broken world. The protagonist is an “orogene”—a term that Jemisin derived from scientific nomenclature for a mountain-forming process—who can channel energies that quell or create earthquakes, with varying degrees of control. For the dominant civilization, which enslaves the orogenes—for use as weaponry or as geological instruments—they are a reviled but necessary underclass. The protagonist’s primary narrative blisters with rage and trauma. Jemisin wrote it in the second person, the voice belonging to a narrator who is not revealed until a later book. “I tried her voice in different forms,” she told me. “I couldn’t get too close to her—she was angry with me in the dream, she’s not going to talk to me. That doesn’t make sense, I know.”

In a different writer’s hands, the use of the second person might have registered as a gimmick, but Jemisin made the device integral to the plot, and deployed it with personality—a voice with quirks and, occasionally, a sense of immediacy. (“Look, the ash clouds are spreading already.”) “The Fifth Season” attracted wide acclaim for its inventiveness, world-building,

and intricate assembly. In 2016, it won a Hugo Award for Best Novel—a first for a black writer. The following year, a sequel, “The Obelisk Gate,” won again. In 2018, the final book in what became the “Broken Earth” trilogy, “The Stone Sky,” won, too. No author in the history of the genre had achieved that recognition. The three books sold more than two million copies worldwide. The *Times* called them “extraordinary.” John Scalzi, the former president of the Science Fiction & Fantasy Writers of America, heralded Jemisin as “arguably the most important speculative writer of her generation.”

Jemisin lives in a duplex apartment in Brooklyn, with an office that looks out onto a garden, which she cares for meticulously. For years, she was an urban literary nomad, working wherever she could park herself with a laptop. “I don’t go to coffee shops anymore,” she told me in her office, late last year. “The best-seller life has made it possible to have this.” She sat at a long desk against the wall; at one end was a cluster of awards. The room also contained a plush Darth Vader and a doll of Commander Uhura, from “Star Trek.” Beside a chair was a chrome lamp resembling a flying saucer; Jemisin flipped a switch, and a band of tiny red lights on the saucer glowed. She had bought it on a trip upstate. “I saw that lamp, I *needed* that lamp,” she said. “It’s corny as hell, and it doesn’t light up shit. It’s just for the mood, but sometimes when I am writing I want to be in that mood and summon the energies.”

Jemisin immediately followed the “Broken Earth” trilogy with two other books. In 2018, she released “How Long ’til Black Future Month?” a collection of short stories. She also completed her next novel, “The City We Became,” the first installment of another trilogy, which is due out this March. Submitting the novel to her editor, a few hours before midnight on New Year’s Eve, she felt depleted; for more than a decade, she had been writing nearly a book a year. She resolved to take 2019 off, but she couldn’t stay idle. She sketched out the new trilogy’s second installment, while also navigating calls from Hollywood, speaking engagements, side gigs. Marvel Comics invited her to guest-write a series—an offer she declined, because she had already agreed with DC Comics to create a “Green Lantern” spinoff. As we sat in her office, the first issue of her comic was slated for release in a few weeks. “This is an unusual year for me,” she said. “Usually, I have only one thing to concentrate on.”

Above her desk she had hung family photos: glimpses of a truncated generational story. “Like most black Americans descended from slaves, it basically stops,” she told me. She once wrote about this loss—not merely the erasure of a backstory but also the absence of all that a person builds upon it; as she put it, the “strange emptiness to life without myths.” She had considered pursuing genealogy, “the search for the traces of myself in moldering old sale documents and scanned images on microfiche.” But

ultimately she decided that she had no interest in what the records might say. “They’ll tell me where I came from, but not what I really want to know: where I’m going. To figure that out, I make shit up.”

“I’ll call my tech guy.” Cartoon Danny Shanahan<sup>2</sup>

Jemisin pointed to a photo of her father, Noah, as a young man—thin, confident, smiling—and spoke about his grandmother, a woman people called Muh Dear: “She basically made her living doing fortunes—magic, for lack of a better term.” In a story that Jemisin included in “How Long ’til Black Future Month?”, she envisioned Muh Dear as a shaman named Emmaline, facing down a malevolent fairy, the White Lady, who wants to take away her daughter. (“The White Lady was nearly all surface; that was the nature of her kind. That was how this meeting would go, then: an appearance of grace and gentility, covering the substance of battle.”) As the two spar, the White Lady draws Emmaline into a roiling dreamscape, in which it is possible to glimpse America’s future: the upheavals of the civil-rights movement; the progress and the tensions that followed. Amid the whorl of imagery, Emmaline offers to sacrifice herself in place of her child if her family is protected. The fairy accepts the gesture: “The White Lady closed the dream around Emmaline, and whisked her away.”

For Muh Dear’s real grandchildren, growing up in mid-century Alabama, there was no shortage of dangers.

Jemisin's father was born in Birmingham, where the commissioner of public safety allowed the Ku Klux Klan to attack the Freedom Riders when their Greyhound buses arrived, in 1961. As Jemisin once recalled, her father spent part of his youth "dodging dogs and fire hoses, turned on him and other Civil Rights protestors."

Jemisin's parents met as students at Alabama State University, and married shortly after graduating. Noah wanted to devote his life to painting, so he applied to a graduate program at the University of Iowa, and the two moved to Iowa City. Jemisin's mother, Janice, pursued a degree in psychology, specializing in psychometrics; she later administered I.Q. tests.

When Jemisin was born, in Iowa, her parents named her Nora Keita. After her first birthday, the family moved to Brooklyn, where Noah strove to establish himself. For income, he taught art, and Janice taught grade-school science. (He now has a painting in the Met, an abstract called "Black Valhalla.") "We were in a beautiful little brownstone," Jemisin recalled. "We had the ground floor and the floor above. There was a gorgeous old mahogany bannister. There were grapevines in the back yard, and a squirrel named Greedy who would come seeking pecans that my grandmother would send me from her tree in Alabama."

When Jemisin was five, her parents divorced, and her mother moved to Mobile. Jemisin went with her, and hated it: the regimentation of Southern society, the quasi-suburban alienation, the racism. While she was in the fourth grade, the Klan burned a cross on the Mobile courthouse lawn, then murdered a black teen-ager named Michael Donald as he walked home from the store. They hanged his body from a tree in a mixed-race neighborhood: a lynching, in the nineteen-eighties. "Not too far from my grandmother's place, actually," Jemisin told me. In a speech in 2013, she recalled its impact on her family: "I remember my grandmother sitting in her den with a shotgun across her knees while I cracked pecans at her feet. I was maybe nine years old, had no idea what was going on. She told me the gun was just an old replica—she'd brought it out to clean it. I said, 'O.K., Grandma,' and asked whether she'd make me a pie when I was done."

Jemisin mastered an outsider's art of adaptation. Shifting between Alabama and New York, where she spent summers with her father, she adjusted to the jarring differences across the Mason-Dixon Line, both social and personal—living in one home shaped by an artist and another by a standardized-test giver. Childhood, she told me, was "a schizoid experience." In Mobile, she shifted across racial divisions, too, attending a predominantly white school that had been forced to desegregate. "I had to get up at o-dark-

thirty to ride the bus for an hour,” she recalled. To exchange comic books with her white friends, she met them clandestinely behind a building.

Science fiction appealed to her at a young age. Little about her real life was cohesive, but imagined worlds could be complete, self-contained, and bound by logic. “I saw ‘Star Wars’ when it came out, because I was a creepy, obsessed space child,” she told me. Later, she mined her local library for science-fiction novels; she covered the books in paper so that she could read them in class. Jemisin also began to write, constantly. Her cousin, W. Kamau Bell, who is now a comedian with a show on CNN, told me, “I wanted to be a comic-book artist, so we would spend our days in the front of my grandmother’s house, laying in the sun, writing, drawing, and talking. We bonded over the fact that we felt like aliens in Mobile.”

Jemisin’s mother did not understand her daughter’s interest in otherworldly fantasies, or her non-stop writing. But her father did. In Brooklyn, she stayed up late with him to watch “Star Trek” and “The Twilight Zone.” Noah Jemisin encouraged his daughter to explore the city, and also to create. “Dad and I would pass time, whole afternoons, not speaking to each other,” she told me. “He would be working on a painting in his studio. I would be sitting on the couch, writing.” In the evenings, they went on walks. “He was my first real editor,” she said. “One of my favorite memories is us walking across the

Williamsburg Bridge. This was before it got renovated. It had fucking *holes* in it. You had to be careful or you would lose a foot! I would talk over story ideas and plotlines. He would listen to all of that.”

One of her first childhood stories was a fable about a fantastical prehuman era in which animals built an advanced civilization, but then destroyed it—along with their ability to speak—in a war. She told me, “I actually published that, by putting two pieces of cardboard around it, wrapping them in paper, and binding it with yarn.”

On its surface, all science fiction is about change—technological, scientific, social—that brings human beings into contact with the unknown or forces a reassessment of the familiar. Nonetheless, the genre remains inextricably tied to the everyday—the biases and limitations of the writer’s time. Jules Verne may have imagined the Nautilus as a futuristic steampunk submarine, but his book expresses a nineteenth-century vision, in which the natural world existed to be dominated by men.

“How Long ’til Black Future Month?” takes its name from an essay that Jemisin wrote in 2013. It begins with two memories of watching “The Jetsons”: first as a girl, excitedly taking it all in, and then as an adult. “I notice something: there’s nobody even slightly brown in the Jetsons’ world,” she wrote. “This is supposed to

be the real world's future, right? Albeit in silly, humorous form. Thing is, not-white people make up most of the world's population, now as well as back in the Sixties when the show was created. So what happened to all those people, in the minds of this show's creators? Are they down beneath the clouds, where the Jetsons never go? Was there an apocalypse, or maybe a pogrom? Was there a memo?"

"The Jetsons" was far from the worst example of racial exclusion. Until 2015, despite years of protest, the World Fantasy Award was a bust of H. P. Lovecraft, a white supremacist who believed that blacks were subhuman and who openly supported Hitler. Even Tolkien's masterwork, "The Lord of the Rings," was complicated by race. He had written his orcs to be revolting, devolved, violent agents of evil. In a letter, he explained his thinking: "They are (or were) squat, broad, flat-nosed, sallow-skinned, with wide mouths and slant eyes: in fact degraded and repulsive versions of the (to Europeans) least lovely Mongol-types."

In Mobile's public library, Jemisin read voraciously, but she almost never encountered characters who credibly represented someone like her. Black writers have been engaged in speculative fiction since at least the nineteenth century, but when Jemisin first immersed herself in the genre their work was either difficult to locate or difficult to recognize. In early pulp science fiction, it was common for writers to sell their

stories using pseudonyms, making their true identities almost impossible to discern. Those few novelists who were openly recognized as black—in the early eighties, there were only four of any prominence—were often encouraged to avoid race in their work.

In 1967, a few months after the notable African-American writer Samuel Delany won a Nebula Award, he wrote to *Analog* magazine, seeking to serialize a daring, experimental space opera he had written, called "Nova." *Analog* passed. As an editor explained, Delany's protagonist was half Senegalese, and white sci-fi readers would be unable to relate. "It was all handled as though I'd happened to have dressed my main character in a purple brocade dinner jacket," Delany later recalled, in an essay on racism in science fiction. To be a black author in the genre, he noted, meant navigating paradoxical demands: editors expected his work to carry no trace of his identity, but, no matter what he put on the page, they would inevitably view it as "African-American science fiction."

"Nova," later published as a book, proved to be highly influential—a progenitor of the cyberpunk movement. Delany recalled that he was frequently invited to speak on panels with Octavia Butler, the only other black author who had achieved his kind of visibility, even though their work was very different. She, too, had to navigate the paradox. "When I began writing science fiction,

when I began reading, heck, I wasn't in any of this stuff I read," she told the *Times* before her death, in 2006. "I wrote myself in."

This simple goal was surprisingly hard to communicate. Just before winning a Nebula for her tenth novel, Butler sat for an interview with Charlie Rose, who asked, "Are you trying to create a new black mythology?"

"No," she said. "I am telling stories that interest me." She spoke a little about what that meant, but Rose persisted: "What, then, is central to what you want to say about race?"

She replied, with a dismissive sting, "Do I want to say something central about race aside from 'Hey, we're here?'" She recalled a panel she had been on, in 1979, with another writer. "He thought that it wasn't really necessary to have black characters in science fiction because you could always make any racial statement you needed to make by way of extraterrestrials," she told Rose. "If he was trying to start trouble he certainly succeeded." Butler later wrote a withering response to the writer's comment, in *Transmission* magazine: "Science fiction reaches into the future, the past, the human mind. It reaches out to other worlds and into other dimensions. Is it really so limited, then, that it cannot reach into the lives of ordinary everyday humans who happen not to be white?"

The essay was powerful, its impact negligible. My own copy of Butler's novel "Dawn"—a brilliant, eerie, thought-provoking book—is a paperback from 1988. The cover depicts a woman resembling Sigourney Weaver in "Alien," even though the text clearly (but lightly) indicates that the protagonist is not white. It contains no author photo, no bio. Jemisin's childhood encounter with "Dawn" was the same edition. Reading it, she had no idea that Butler was black.

Hudson Yards was crawling with superheroes and villains and oddballs: people dressed like Storm Troopers, like Batman, like Godzilla, like Care Bears. It was the weekend of New York Comic Con, the Mecca of nerd culture that, every year, seems to grow bigger, more commercial, more theatrical in its costume pageantry. One attendee wore a white dress supporting feathered Pegasus wings the size of a small hang glider.

I met Jemisin outside the Javits Center. She was wearing a leather jacket, a black blouse, and jeans, with her hair pulled back. She is often invited to speak about her books at Comic Con, but, as a novelist, she is generally spared the titanic promotional machinery that surrounds the main attractions: the stars hyping Hollywood films, the pavilions hyping triple-A video games, the m.c.s hyping comic-book celebrities. Jemisin, who describes herself as "a supercharged introvert," is just fine with that.

This year, though, there was no avoiding one of the largest hype machines. Her “Green Lantern” spinoff, “Far Sector,” was scheduled for release just after the convention. “All right,” she said. “I’ve got to get to the DC publicity area. Where the hell is that?” We passed through metal detectors and into a huge atrium. Surveying the hordes, she said, “I am imagining there is a black hole under Javits sucking all the energy out of the people here.” To get through the day, she promised herself an evening of recovery: first relaxing with a Lush bath bomb, then slaughtering some digital foes in *Mass Effect 3*.

“Far Sector” is set at the edge of the known universe, in a multispecies city-state built on a Dyson sphere—a speculative megastructure, named after Freeman Dyson, who once postulated that hyper-advanced alien civilizations would seek to harness the energy of stars by encasing them in technological shells. The story centers on Sojourner Mullein, an N.Y.P.D. cop turned Lantern, who looks as if she has been cloned from the Afrofuturist pop star Janelle Monáe. Although it is a comic book, the writing carries Jemisin’s wry tone, interest in power, and unapologetic use of allegory. The series opens with Mullein surveying a murder scene, while considering an aphorism from “Things Fall Apart,” Chinua Achebe’s novel of colonialism: “A man who makes trouble for others is also making it for himself.” It lingers in her mind, but Mullein dismisses it, noting, “I’m the one causing the trouble. Just by existing.”

When Jemisin was in her twenties, she believed that a career in writing fantasy was closed to her, because of who she was. Instead, she pursued a graduate degree in psychology, and later took a job as a career counsellor at a college in Springfield, Massachusetts. “God help me,” she told me. “Isolated. Also cold as fuck! Nobody told me that, like, lake-effect snows happen in western Massachusetts.” To keep herself sane, she kept writing, often anonymous online fan fiction. (She still writes fan fiction, using secret identities that she guards aggressively.) A few years later, she landed a position at Northeastern University, in Boston, but felt no less lost there. In 2002, when she turned thirty, she had a moment of crisis. “I was, like, Oh, God, I am in debt up to my eyeballs, I hate this town, I don’t like my boyfriend,” she said. “I have got to reorder this. What do I need to do to be happy? O.K., get out of debt, get out of Boston, get into writing—maybe make some money from it, maybe that can help.”

Jemisin considered applying to the Clarion writers’ workshop, which specializes in science fiction and fantasy; luminaries in the genre teach there. But the workshop lasted six weeks—longer than she could take off from work. Instead, she attended a one-week workshop on Martha’s Vineyard. One instructor urged her to write some short stories. Jemisin at first chafed at the idea, but then relented, recognizing that the form’s constraints could sharpen her sense of pacing and character. She

subscribed to genre magazines to study some examples, then tried her hand.

"How Long 'til Black Future Month?" includes one of her earliest published stories, "Cloud Dragon Skies" (2005), in which an ecological disaster has caused most of humanity to abandon Earth for a ring-shaped space colony, built from crushed asteroids, beyond Mars. "Old foolishness lay at the root of it," notes the narrator, a young woman named Nahautu, one of the few who stay. The planet has rebounded, except for the atmosphere. The toxic chemicals it has absorbed combine to form a new kind of life:

One morning we awoke and the sky was a pale, blushing rose. We began to see intention in the slow, ceaseless movements of the clouds. Instead of floating, they swam spirals in the sky. They gathered in knots, trailing wisps like feet and tails. We felt them watching us.

In just a few pages, Jemisin sketched a scenario filled with ambiguities and philosophical questions. (How is nature defined? What represents progress?) The people on Earth decide to treat the animate clouds as natural—believing that, in a redemptive future, humanity must adapt to its ecosystem, not shape it. But scientists from the space colony try to neutralize the effect, and the sky reacts violently, tearing up the planet. Fleeing Earth in a coffinlike pod, Nahautu travels to the colony, an

engineered world that is both better and lesser than the poisoned Earth. She is not fully at home in either place. In her new life, she becomes a storyteller.

DC Comics had a greenroom overlooking the Javits exhibition floor; after Jemisin spoke on a panel at the Comic Con main stage, a publicist ushered her there. Relaxed, she was in a joking mood. "My Twitter is full of bitch," she warned the publicist. Online, Jemisin is an active, quick-witted commentator, lacing her posts—about politics or about the writing life—with zingers and tart observations. In 2015, the *Times* invited her to write a column about science fiction, called "Otherworldly"; she did so for two years, proving to be a perceptive and at times unsparing critic. In 2017, she described Andy Weir's "The Martian," a surprise hit that inspired a blockbuster film, as "Robinson Crusoe in space," and his next novel, "Artemis," as "a 300-page film pitch that, like its predecessor, will probably be more appealing after it goes to Hollywood." That year, TNT announced that it was going to develop Jemisin's "The Fifth Season" into a series—an ambitious or perhaps foolhardy bid, given the book's narrative complexity and experimental style.

"These are payments for babysitters, but it's more exciting to pretend I'm a drug dealer." Cartoon Amy Hwang<sup>3</sup> The DC publicist asked Jemisin, "Do you prefer to be called Nora or N.K.?" She laughed and said, "Nora is fine."

Mom called me N.K. when I was in trouble as a child, so every time someone says it, I'm, like, 'What? I didn't do it!'"

Jemisin began to abbreviate her name at the start of her writing career, fearing that an association with sci-fi would interfere with her professional work. While she was at Northeastern, she imposed a strict deadline: to produce a novel within a year. Because she had a full-time job, most of the writing had to happen at night, but, she told me, "after work, my brain just couldn't make that shift." Mostly, she found herself mapping out ideas while doing the dishes or playing video games. She wrote every evening before bed, even if she knew most of it would not survive a self-edit the next day.

The novel that resulted was set in a kingdom inspired by ancient Egypt, with a belief system that drew on Eastern and Western religious ideas, as well as the Hippocratic notion of bodily humors. One of Jemisin's invented humors is a form of healing magic tied to dreams. A priestly caste, called Gatherers, harvests it from people whom a goddess judges to be corrupt; the extractive process is deadly, but the system keeps the society in balance. At the book's opening, a skilled Gatherer botches an extraction. In trying to figure out why, he learns that an assassin has been using the process to murder. "I was trying to appeal to traditional fantasy readers," Jemisin said. "It is a bog-standard fantasy quest story."

The book landed her an agent, Lucienne Diver, but no contract. Diver told me, "We got a lot of people saying, 'She's amazing, but I don't know how to fit her into the market.'" She thought that the setting, the story's complexity, the alchemy of Jemisin's various source materials—the very attributes that made her stand out—also made the book hard to position for a first-time author. Devi Pillai, then an editor at Orbit, told me that she had loved the book but thought that it had no clear sales hook. She told Diver, "If she has anything else, I want to be the first to see it."

Jemisin was convinced that the rejections, however politely stated, were code for the same editorial bigotry that Delany had faced in the sixties. (In 2012, after Jemisin had established herself, the book was published, as "The Killing Moon," and nominated for a Nebula.) "I came very close to quitting," she told me. "I had a long dark tea-time of the soul, and basically somewhere in there I realized, People are just *that* racist. If the only problem is that the book is full of black people—O.K., I got you. I am going to write something full of white people, but it is going to be all about how evil those white people are. 'The Hundred Thousand Kingdoms' was that book. It was me getting mad at science-fiction publishing."

Whatever Jemisin's anger with the industry, she produced a shrewd, philosophically playful page-turner that both reflected and transcended

her feelings. She decided to write it in the first person—unusual for epic fantasy, which often leans on the third person to accommodate expositional detours about the imagined world. The story was no less original: it was about a warrior baroness summoned to an insular palace balanced on a pedestal, like an Eero Saarinen tabletop. The baroness is drawn into court intrigues and must solve a family mystery; eventually, she upends the society's power structure, and along the way has interstellar sex with a god. (Jemisin told me that the book could have been marketed as a romance.)

Diver shopped the manuscript, and it inspired an immediate bidding war. Devi Pillai told me, “I was, like, ‘Mine!’” By then, Jemisin was working unhappily at a for-profit college in New York. “I was at some stupid-assed retreat, and I kept ducking out to take calls from my agent,” she told me. Pillai won the auction, with a six-figure bid that included a commitment for two more books. “I started screaming,” Jemisin told me. “People at the retreat were, like, ‘Should we call somebody?’”

For the first time, Jemisin could devote herself fully to writing. When Orbit began promoting the book—comparing it to the work of Neil Gaiman and George R. R. Martin—she created a Web site for herself. “Do big kids squee?” she wrote. “’Cos I think a squee is appropriate right about now.

I can’t see how a little squee would hurt. Are we all agreed? ’Kay? Then here goes. ::SQUEE::”

In December, I caught up with Jemisin on the steps of City Hall, where she had come to research the second installment of her new trilogy. Rather than build a fantastical world for it, she decided to use New York, a city that has always seemed a little unreal. As she told me, “Sometimes, when I am walking, the air feels a particular way, or the light comes in at a particular angle, and the moment makes me feel like the city is alive and breathing.”

For the new trilogy, she had chosen to make these feelings literal, positing that any city, upon reaching the necessary urban development, could achieve sentience. New York is about to transition when it is invaded by interdimensional aliens seeking to destroy it. The story is part “Ghostbusters,” part “The Adventures of Buckaroo Banzai Across the 8<sup>th</sup> Dimension.” Jemisin told me that the project was a chance to relax, “an emotional palate cleanser,” but it was also a coded critique of the sci-fi and fantasy genre. The aliens take on Lovecraftian form (“The tendril mass looms, ethereal and pale”) and are fought off by a multi-ethnic, multi-gendered posse of underdogs—people Lovecraft would have hated.

More than a decade earlier, Octavia Butler had asserted, “Hey, we’re here.” But, Jemisin told me, “we have to *keep* saying it.” Recent history, she said,

had made this evident. In 2009, after a white novelist posted a formula for “writing the other,” many people of color in the genre erupted in frustration, triggering a contentious series of online debates, known collectively as RaceFail, that unfolded for more than a year. At a conference, Nalo Hopkinson, a Jamaican-Canadian writer, delivered a speech titled “A Reluctant Ambassador from the Planet of Midnight,” in which she tried to explain the explosion of anger to her white colleagues—making clear that Butler’s sense of invisibility was still sorely felt. Jemisin told me, “One blog was, like, ‘If you’re a person of color who is into science fiction, speak up. We’re doing a head count of how many of us exist.’ And it was a huge number. I had thought we were unicorns. In fact, the post was titled ‘The Wild Unicorn Herd Check-in.’”

Amid a reactionary backlash, Jemisin became a target. In 2013, she gave an impassioned speech about race in the genre, noting that a white supremacist had just run for president of the Science Fiction & Fantasy Writers of America. Though he lost, he had secured ten per cent of the vote, prompting her to criticize the “great unmeasured mass of enablers” who had been silent. The former candidate, in turn, called her an “ignorant half-savage” in a racist screed. Jemisin told me, “That touched off a whole big foofaraw.” Threats of violence poured in. She scrubbed her online presence and began to vary her commute.

Jemisin’s successes were caught up in the foofaraw, too. As the cultural divide sharpened, two blocs of conservative writers began interfering with the Hugos, using a loophole to shape the list of nominees; until it was closed, two years later, people protested by selecting “No award” on ballots. “*The Fifth Season*” won its award just after the loophole was closed. Accepting her third Hugo, Jemisin stood at the lectern, with the rocket-shaped award beside her, and declared, “This is the year in which I get to smile at all of those naysayers, every single mediocre, insecure wannabe who fixes their mouth to suggest that I do not belong on this stage, that people like me could not possibly have earned such an honor, and that when *they* win it’s ‘meritocracy,’ but when *we* win it’s ‘identity politics.’” Holding up the award, she added, “I get to smile at those people, and lift a massive, shining rocket-shaped finger in their direction.”

In Jemisin’s forthcoming New York novel, “*The City We Became*,” she borrows from some of her experiences: the aliens induce alt-right trolls to assist them, and the protagonists gird against cyber-harassment. “Places like New York are inherently free-form,” Jemisin told me. “If a bunch of fascists try to take over, New York could die.” She said that she was curious to explore “the ways in which the city, and the energy of a place like this, would resist that.”

In the City Council chambers, where she hoped to place a scene in her next book, Jemisin sat in a balcony and observed the rituals and the moods of Gotham politics. There was a tribute to Pakistan's founding father, and a bill to force real-estate developers to set aside apartments for the homeless. She was especially keen on the way members conferred in side chats—a narrative opportunity. "I see that they are using a modified version of Robert's Rules of Order," she noted.

After three hours, her stamina waned. "This is putting me to sleep," she whispered, and we stepped out into the cold, under a darkening sky. The night before, a snow squall had enveloped the city and then quickly receded, as if on supernatural command. To the north was the Williamsburg Bridge, which in Jemisin's new book is destroyed by an alien creature, "like some haunting, bioluminescent deep-sea organism."

The promotional material for "The City We Became" describes it as her most accessible book. "What seems to be happening, and I don't know if I want to resist this, is an effort to push me into the mainstream," Jemisin said. "I am wrestling with, Do I want to let people call me the next Atwood, or whatever? They always want you to be the next such-and-such. But I am still going to write what I am going to write." Crossing Broadway, she mentioned an idea that was unrelentingly sci-fi: people who mutate into spacecraft. "Like werewolves, but spaceships," she said,

giggling. "I know, it's corny. *I admit that it's corny!* But it is an idea that persists in my head, and I keep wanting to explore it." ♦

From: <https://www.newyorker.com/magazine/2020/01/27/nk-jemisins-dream-worlds>

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# BOUDICA THE WARRIOR QUEEN

\* getpocket.com \* Caitlin C. Gillespie \* 12 minute read \*

**How a widowed queen became a rebel warrior, defying Roman patriarchy, and leading her people to glory even in defeat.**



Boudica, Queen of the Iceni, from "The Costume of the Original Inhabitants of the British Isles" 1815

**In the 1<sup>st</sup> century CE**, Boudica, warrior queen of the Iceni people, led an army of 100,000 to victory against the mighty Roman Empire. So complete were Boudica's triumphs that Rome was in danger of losing control of her province. Riding high on a war chariot, daughters behind her, she led her Britons in a vengeful fight for freedom. But what did freedom mean for an Iron Age queen and her people, and what were its limitations under empire?

To appreciate Boudica's place in the Roman world, it is necessary to understand something about ancient

misogyny. The Romans viewed women warriors as indicative of an immoral, uncivilised society, and this attitude helped to rationalise their subjugation of other peoples. Nevertheless, these women became legends.

Ancient Rome prided itself on the power of its patriarchy, and was quick to condemn women who broke boundaries and encroached upon the rights, privileges and positions of power held by men. The voices of these women were silenced, their stories transmitted by men, their characters exaggerated for literary effect. Juvenal, for example, composed an entire satire devoted to denigrating women. Considering female gladiators, he asks: 'How can a woman who wears a helmet be chaste? She's denying her sex, and likes a man's strength.' Juvenal blames luxury and riches, the 'evils of a long peace', for producing such 'monsters', women who adopt male roles. Juvenal's label reveals a deep-seated fear of female power and autonomy that permeated Roman society.

In imperial Rome, law, family and society combined to restrict a woman's participation in public life, based on traditional morality and an understanding of what was best for

members of a sex considered weak and unwarlike by nature. Women who appeared in military situations were anomalous in this system, although exceptions did occur. In the early days of Rome, the legendary Sabine women rushed on to the battlefield between the Romans and Sabines, demanding peace between their husbands and blood relatives. These women were successful because they acted on behalf of their families, without taking up arms. By contrast, in the early 1<sup>st</sup> century CE, Agrippina the Elder, a member of the ruling family, was severely criticised for taking on the responsibilities of a general in supporting her husband Germanicus' retreating troops. Plancina, Agrippina's contemporary, broke the bounds of female decorum by observing the practice exercises of her husband Piso's cavalry. The Roman senate even debated whether women should be allowed to join their husbands on provincial governorships. What if they became more powerful than their husbands in the home, the forum and the army?

Women warriors epitomised these fears. Legends of the Amazons proliferated in the ancient world—women warriors of the Steppe who travelled on horseback and cut off one breast so that they were not impeded from drawing back their bows. Penthesilea, queen of the Amazons, led her women into the midst of the Trojan War, and was admired by Achilles for her ferocity: he sought her out in battle, and even at the moment of her death, their eyes met

and he fell in love. Thus sexuality and the warrior woman became intertwined. The pattern persists in Roman literature.

Dido of Carthage, Cleopatra of Egypt and Boudica of Britain all held positions of power that were not limited on the basis of sex. Paradoxically, Roman authors used their stories as evidence of innate female weakness and an inability to lead. Literary portraits connect these women's sexuality to poor leadership skills. In Virgil's *Aeneid*, Dido commits suicide over her obsession with Aeneas. Virgil's contemporaries, the poets Propertius and Horace, denounced Cleopatra as a 'whore, queen of incestuous Canopus', and a 'deadly monster' drunk on wine, who enslaved Marc Antony through her cunning and irresistible charm. Images of such women minimised their ability to lead through sexualising the female form, including a personified Britannia cowering from the emperor Claudius. The representation of a province as a sexualised, dominated female body is common in monuments and on Roman coinage. In triumphal imagery large and small, a man's domination over a woman's body becomes analogous to Rome's expansion of her empire and control over provinces and peoples.

Boudica (also spelled Boadicea or Boudicca), queen of the Iceni in Britain, provides a case study for the reception of women warriors. She encapsulated the idea of the warrior

queen from the time of her revolt in the 1<sup>st</sup> century, and maintains a towering presence today. Boudica survives in the accounts of two Roman historians: Tacitus, writing in the late 1<sup>st</sup> and early 2nd century CE, and Cassius Dio, writing a century later. The authors differ in their details, but agree that Boudica unified the Britons as never before and led a revolt against the Romans in 60/61 CE. Her story creates a parallel between different views of gender equality held by the Romans and the Britons, and the dichotomies of empire and colony, power and subjugation. Boudica's name means 'Victory' – but what exactly did she win?



**In the Roman accounts,** Boudica fought for freedom from the Romans, a colonial oppressor she viewed as greedy and immoral. According to Tacitus, after the death of her husband, the client king Prasutagus, Boudica's life took a dark turn. The Romans beat her and assaulted her daughters. They enslaved her relatives and confiscated Prasutagus' land and ancestral wealth. Boudica's motivations for revenge are personal, but her experiences provide a case study for the broader impact of Roman imperial expansion.

At the time of her revolt, Boudica's Iceni were allies of the Romans, but did not engage in the same level of trade as other tribes in southeastern Britain. No urban centre existed in East Anglia, the area occupied by the

Iceni, and archaeological evidence suggests a conformity with Iron Age expectations. Families lived in settlements of thatched timber roundhouses, not towns, and upheld an agricultural economy. Hoards of gold, silver and electrum jewellery and other items attest to their wealth, including hundreds of torcs, intricate neck rings that were markers of wealth or status; ritual deposits of this material were buried at sites of religious importance. The Iceni had their own coinage, and did not use many imported goods. Thus they were able to remain separate from the political, social and commercial activities of Roman towns and colonial settlements that cropped up in Britain after the Roman invasion of 43 CE. Their unfortified homes and decentralised areas of occupation were ripe for plunder by the invading army.

Gender expectations and social strata among Boudica's society are not neatly defined by the ancient material. Nevertheless, it is clear that the Roman occupation questioned the authority of her family and their local position of power. Boudica's motherhood was key to her success. Her response to the Romans followed a primal instinct to avenge her daughters. However, her call to action instigated uncontrolled violence on the part of her army, initiating a vengeful response by the Romans that endangered all Britons. The actions of her army were used in part to justify the need for Roman control.

In spreading their empire, the Romans also aimed to transform those perceived as barbarians into complacent subjects. Tacitus outlines this process in his biography of his father-in-law, Agricola, who served as governor of Britain from 77–84 CE. Agricola urged the Britons to build temples, public spaces and homes, thereby making a people formerly ‘scattered and barbarous and therefore inclined to war’ accustomed ‘to rest and repose through the charms of luxury’. The Britons also learned to desire the eloquence of Latin, to wear the toga, and to receive Roman citizenship, but were drawn to the vices of the bath and fine dining. Tacitus concludes that this acculturation was part of their servitude.

In the film *Monty Python’s Life of Brian* (1979), Reg ponders: ‘They’ve taken everything we had … And what have they ever given us in return?’ The response—sanitation, medicine, roads, fresh water, baths, education—lists just some of the Roman Empire’s contributions to European society. But the question of servitude remains: the Romans took their dues in taxes and lives, and engineered the environment to become Roman. This imperial agenda met with particular resistance from those whose positions in society were eliminated, including Boudica, the warrior queen.

Progressive as a female leader, she is retrogressive in her desire to remain separate from Roman civilization

Had Boudica accepted Roman rule and altered her life to suit that of her conquerors, she might have been recognised after death for her more conventional qualities. An honorific epitaph for Boudica in Roman terms would have been composed following a formula based on a Roman understanding of normative gender roles: she would have been identified in relation to a man (wife of Prasutagus), noted for her success as a mother (she bore two children), and praised for her domestic virtues (for example, that she kept house and made wool). As a figure of resistance, she requires a different memorial.

Boudica revolted in the generation before Agricola arrived in Britain. Her ancient portrait brings attention to questions of gender and power in the ancient world, as well as the impact of a colonial power on her subjects. After suffering at the hands of the Romans, Boudica united the Britons and took her revenge. While the Roman general Suetonius Paulinus was away in Wales, attacking the Druidic centre at Mona (Anglesey), Boudica formed her army. Thousands of Britons marched towards the Roman provincial capital at Camulodunum (Colchester) and burned it to the ground, before advancing on Londinium (London) and Verulamium (St Albans). They tortured their prisoners and took no spoils, perhaps aware that their victory would be short-lived. On their return from Mona, Suetonius Paulinus and his well-trained Romans

defeated the Britons in a single pitched battle, and Boudica's Iceni never recovered.

Boudica's actions as a warrior are left to the imagination, as Tacitus attributes the destruction to a universalised 'Briton'. Boudica's impact is visible as she rallies her army. Before the final battle, she speaks to her warriors, using her personal injury to galvanise an entire people to action. As one woman among many, she calls for justice on behalf of all those assaulted by the Romans. She asserts that it is British custom to fight under a female leader, and proclaims the necessity to win or die trying. Even the gods are on their side, so how could they lose? Despite her exhortation, the Romans win handily, and Boudica commits suicide rather than allow herself to be taken prisoner. Her courage in death is admirable. Like Cleopatra, she would rather die than be paraded in a Roman triumph.

Dio, on the other hand, revels in Boudica's Amazonian qualities. His Boudica is superlatively tall and terrifying to behold. She wears the golden torc of a regent and the multicoloured tunic of a Briton. Her eyes glance fiercely, and hair the colour of a lion's mane falls down to her hips. She grasps a spear to address her troops, instilling awe in all. In her speech, she condemns the Romans for oppressing the Britons through excessive taxes. She feminises the Romans as weak and unequal to the harsh weather and rough terrain of

Britain, while celebrating her society as enduring and hardy. Her people know no gender distinctions: men and women in Britain share everything in common, including glory on the battlefield. Furthermore, she celebrates Britain's separateness: her people are 'so separated by the ocean from all the rest of mankind that we have been believed to dwell on a different earth and under a different sky'. After their initial victories, her army treats their captives with unspeakable cruelty, impaling the noblewomen on stakes, all in the name of a goddess of Victory. When Boudica dies, the Britons honour her with a magnificent burial and disperse, regarding themselves as defeated.

In her speeches, Boudica juxtaposes Roman avarice with British freedom. She uses the promise of freedom as a motivating factor, but what does this mean? Both Tacitus and Dio took a conventional term from Roman political thought and applied it to a situation they did not participate in or even witness. Both fail to consider how Boudica's followers would have defined freedom or how it would have looked to someone living in her society. In part, this failure is the point. Tacitus and Dio depict a Boudica who desires autonomy from Rome. Her situation can be generalised as a fight for freedom from a tyrannical force. Both authors survived the regimes of tyrannical emperors to enjoy times in which the freedom of speech existed once more.

Boudica seeks freedom from persecution and the changes forced upon her and her Britons by a colonial power. She thus presents a problem for the idea of progress. She is a progressive figure from a modern perspective, as a female political and military leader, but retrogressive in her desire to remain separate from the Romans and their conceptions of civilisation and urban development. Her celebration of the lifestyle of the Britons includes gender equality and the opportunity to share equally in valour, but such equality would require a return to the Iron Age.



### **Despite her powerful words,**

Boudica failed as a military leader. Her army was defeated in a single battle and her people slaughtered. Her revolt did not have a lasting impact or limit the Roman presence in Britain (rather, the opposite occurred), yet it left a long and varied cultural legacy. Boudica has been mythologised, redefined and pressed into service to suit varying contexts, held up as an imperial icon, guardian of national identity, and champion of women.

Her reception has been generally positive, although inconsistent. Readers might weep for her and her daughters, admire her ability to unify the Britons, and sympathise with the desire to oppose any foreign power. However, they also remonstrate the violence of her army's revenge—is this lawlessness the result of too

much freedom? Still, Boudica reminds audiences of their own struggles. She has been used to make various points about contemporary society, and inserted in discussions of gender, race and power, as well as in debates about Britain's relationship with the rest of Europe.

Boudica could hardly have imagined her story to last for millennia, nor would she have recognised herself as a harbinger of the British Empire, a figure of nationalism, a symbol for suffragists or a supporter of Brexit. British queens and female politicians have adapted her warrior identity. Elizabeth I was compared with the outspoken warrior, and Queen Victoria embraced her as a precursor, a Celtic Victoria. In the 20<sup>th</sup> century, Margaret Thatcher was known as a political battleaxe, a 'Boadicea in pearls'. More recently, Theresa May was dubbed the 'Brexit Boadicea'. Boudica's resistance to the Romans is recast as removal from the EU, her defeat overlooked by Brexit supporters. In autumn 2018, her story played out on the stage of Shakespeare's Globe in the form of Tristan Bernays's play *Boudica*, perhaps warning against 'the danger of splenetic isolation'.

In the US, Boudica has a place at a different table. In the 1970s, she became part of Judy Chicago's installation *The Dinner Party*, now the centrepiece of the Elizabeth A Sackler Center for Feminist Art in the Brooklyn Museum. As one of 39 guests, Boudica is seated among

women from the Primordial Goddess through to the artist Georgia O'Keeffe. Her place setting utilises Celtic imagery adapted from 1<sup>st</sup>-century evidence; her presence marks her as a feminist icon.

Boudica continues to fill a cultural need, and her story has especial relevance for today's 'women warriors', those fighting for gender equality throughout the world. This includes women engaged in the struggle for equal opportunities in politics and the academy, in Title IX cases and the #MeToo and Time's Up movements. Boudica's reception

allows us to broaden our perspective on the concept of freedom, particularly regarding gender bias and cultural conformity. Although their battlefields are different, the message of these women remains. Freedom means that women are able to live without fear of persecution on the basis of sex. There will continue to be Boudicas as long as women continue to test and redefine the limits of this freedom, until such limits cease to exist.

From: [https://getpocket.com/explore  
/item/boudica-the-warrior-queen](https://getpocket.com/explore/item/boudica-the-warrior-queen)

# WHY WE SLEEP—A TALE OF INSTITUTIONAL FAILURE

\* yngve.hoiseth.net \* Tuesday 24 March 2020 \* Yngve Hoiseth \* 11 minute read \*

## Introduction

This is the story of how UC Berkeley dropped the ball when they were made aware that one of their professors possibly committed research misconduct. It is also the story of how publishers Press<sup>1</sup> and Penguin<sup>2</sup> failed to even acknowledge the ball's existence.

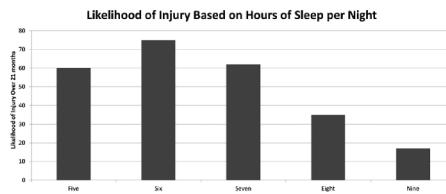
## Falling in love with sleep

In the summer of 2019, a friend recommended I read Matthew Walker's book *Why We Sleep*<sup>3</sup>. I did, and I loved it. I was thoroughly convinced that I needed to be more diligent about getting enough quality sleep. So, I bought a smartwatch in order to gather data on my sleeping patterns. I also bought five additional copies of the book, and handed them out to friends and family. So far, so good.

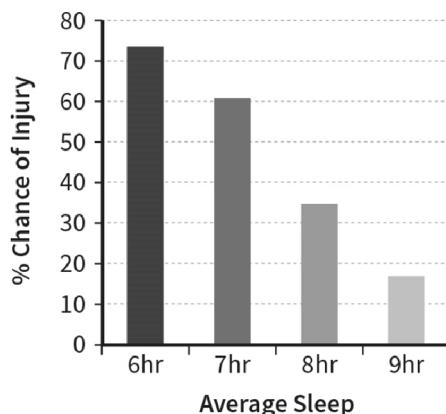
## Caught red-handed

A few months later, I came across Alexey Guzey's article *Matthew Walker's "Why We Sleep" Is Riddled with Scientific and Factual Errors*<sup>4</sup>, and I was blown away. It's well worth a read, but if you decide to skip it, you

should know that Guzey thoroughly fact-checked a single chapter. He found a lot of problems. The most obvious case of misconduct, in my opinion, was omitting part of a chart from a quoted paper. This is the original chart from the paper Walker cites:



In *Why We Sleep*, it somehow became this:



The omission of the 5 hour bar made it seem like there is better evidence for Walker's claim than there actually is. I strongly believe it falls under UC Berkeley's definition of falsification<sup>5</sup>:

**Falsification** is manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented in the research record.

Note that, while I believe this to be a clear case of research misconduct, I am not making any claims about what consequences Walker or anyone else should face. That's a different question.

## Blowing some whistles

Even though I take pride in my ability to adjust my opinions in the face of new evidence, it can really hurt, and it sure did this time. Now what should I believe? And what fragments of false belief were left behind in my mind? On top of that, I had to notify the people I gave the book to. When there are that many errors *in a single chapter*, who knows how many there might be in the rest of the book? It was clear to me that the book could not be trusted.

I reached out to Penguin, UC Berkeley and the Norwegian publisher Press (which published the Norwegian translation).

The worst reaction was from Press—they didn't respond at all. Penguin said that the editorial team would take a look, but I never heard back from them. UC Berkeley responded promptly but concluded that they would *not* conduct a formal investigation.

Below, I'm publishing my email exchange with UC Berkeley so that others can see it rather than it just gathering dust in my email archive. In a way, it's unfair to pillory UC Berkeley, considering that they actually have a process for dealing with research misconduct and at least responded to my complaint. Compare that to the publishers, who neither have a process nor responded. Nevertheless, I expect more from a renowned research institution like UC Berkeley, so I still believe I'm right to publish our correspondence.

## Institutional failure

I think we should demand a lot from institutions and very little from individuals. Humans can be lazy, selfish, biased and greedy. They can also be also hard-working, altruistic, fair and generous. But the dark side of humans isn't going away any time soon. Institutions, however, can do a lot better than individuals. (The scientific community is an example of such an institution—despite individual scientists' many imperfections, science keeps progressing.)

Therefore, I view this farce as a series of institutional failures rather than personal ones. And my hope is that we can improve these institutions by criticizing them when they fail. That is what I'm trying to do with this article.

## Email exchange with UC Berkeley

Because this failure is UC Berkeley's more than any individual's, I have edited the exchange slightly by removing the names of their representatives. In order to keep it as short as possible, I've also taken out greetings like "Hi" and "Kind regards". However, in order to be transparent, I've uploaded the entire exchange here<sup>6</sup>.

So, see the emails below and make up your own mind. You can comment on Twitter<sup>7</sup>, Hacker News<sup>8</sup>, r/[slatestarcodex](#)<sup>9</sup> or email me directly.

So, without further ado, the email exchange is below. It took place in the first three months of 2020.

### **Me:**

Matthew Walker, a professor at UC Berkeley, wrote *Why We Sleep* (2017). It turns out that it's riddled with scientific and factual errors<sup>4</sup>.

Also see "Why we sleep" data manipulation: A smoking gun?<sup>10</sup> by Andrew Gelman, director of the Applied Statistics Center at Columbia University.

Is this something you can look into? Or should I reach out to someone else?

### **UC Berkeley:**

It is indeed one of my duties at UC Berkeley to look into allegations of research misconduct. I will consult with colleagues in the field to get their assessment of the concerns raised about the data citation and analysis in Walker's book.

### **Me:**

Great, thanks a lot :)

### **Me (a few weeks later):**

I'm curious about whether anything has happened in this case.

Also, you might be interested in knowing that Guzey recently appeared<sup>11</sup> on the Smart People Podcast, where they discussed his critique. (The first part is a more general interview, so you might want to skip ahead to the 13:45 mark.)

### **UC Berkeley:**

We did follow up on the allegations of research misconduct against Matthew Walker by following our usual protocol, asking a qualified researcher from a relevant discipline—someone without ties to Professor Walker—to determine whether the claims warrant-

t further investigation and inquiry. This individual found that Professor Walker had included a link to the allegations on his website, that he has addressed the issues raised, and that he has announced his intention to correct any mistakes in the next edition of his book. Based on the facts and these findings we found no cause for further investigation. We believe, based on the evidence, that while there were some minor errors in the book, which Walker intends to correct, there was no research misconduct per our definition (here<sup>5</sup>).

### **Me:**

Thanks for getting back to me. I have a couple of follow-up questions:

Based on the facts and these findings we found no cause for further investigation. We believe, based on the evidence, that while there were some minor errors in the book, which Walker intends to correct, there was no research misconduct per our definition (here).

I have to say, I find it very surprising that you don't think there's any cause for further investigation. After all, I.A.b states:

Falsification is manipulating research materials, equipment, or processes, or changing or **omitting data or results such that the research is not accurately represented in the research record** (emphasis mine).

As documented by Guzey<sup>12</sup>, Walker clearly omitted data by removing a bar from a chart when reproducing it. The omission makes it seem like the research clearly supports his hypothesis when, in fact, it doesn't. How did you conclude that this does not fit your definition of research misconduct at least well enough to warrant further investigation?

This individual found that Professor Walker had included a link to the allegations on his website, that he has addressed the issues raised, and that he has announced his intention to correct any mistakes in the next edition of his book.

Where, exactly, does he do these things? If I'm not mistaken, <https://www.sleepdiplomat.com/><sup>13</sup> is Walker's website, and <https://www.sleepdiplomat.com/author><sup>3</sup> is the section about Why We Sleep. But I haven't found any link to the allegations there.

### **UC Berkeley:**

Thank you for your interest in this matter, which we have pursued in accordance with our policy. In conversation with Walker and with the

professor who conducted the inquiry, the conclusion was that the bar omitted from the graph on the book did not alter the findings in an appreciable way, and more importantly, that the bar was not omitted in order to alter the research results. The other errors Guzey cites are similarly minor. Walker transparently refers to this errors in his blog here:

[https://sleepdiplomat.wordpress.com/2019/12/19/why-we-sleep-responses-to-questions-from-readers/#6\\_or\\_fewer<sup>14</sup>](https://sleepdiplomat.wordpress.com/2019/12/19/why-we-sleep-responses-to-questions-from-readers/#6_or_fewer<sup>14</sup>), and announces his intention to repair them in the next edition of the book. It seems that there is a difference of opinion as to the significance of the errors and the omission of the bar from the graph, and difference of opinion is explicitly addressed in our policy [here<sup>5</sup>](#).

*Note: The link in the email was broken, so I fixed it. Originally, the link target was "http://d. Research misconduct does not include honest error or differences of opinion. '(§ 93.103, 42 CFR Part 93)."*

## Me:

Thanks for the clarification.

Walker transparently refers to this errors in his blog here:

[https://sleepdiplomat.wordpress.com/2019/12/19/why-we-sleep-responses-to-questions-from-readers/#6\\_or\\_fewer<sup>14</sup>](https://sleepdiplomat.wordpress.com/2019/12/19/why-we-sleep-responses-to-questions-from-readers/#6_or_fewer<sup>14</sup>), and announces his intention to repair them in the next edition of the book.

The article you're linking to

- does not mention the chart with the missing data;
- is not on any of Walker's official websites;
- does not mention Walker by name; and
- is, as far as I can tell, not linked to by Walker anywhere, e.g. his websites or Twitter feed.

I don't understand how this is acceptable, not to mention transparent. It seems pretty clear to me that Walker isn't properly owning up to this.

It seems that there is a difference of opinion as to the significance of the errors and the omission of the bar from the graph, and difference of opinion is explicitly addressed in our policy here.

It's clear that Walker omitted "data or results such that the research is not accurately represented in the research record." I don't see how the sentence about difference of opinion is relevant in this case.

Anyway, I feel like we're getting a bit lost in the weeds here. The reason I'm unsatisfied with your response is that I think research integrity in general is very important for society, and in this specific case I personally spent quite a lot of time and resources on Walker's book. I bought a pile of them which I gave away to friends and family, and I got gear to track and improve my sleep.

Guzey uncovered many errors by thoroughly reading a single chapter of a book Walker even cites in his own papers<sup>15</sup>. And Gelman says that we've entered research misconduct territory<sup>10</sup>. Now, I don't know what to believe. I worry that science dies by a thousand such cuts.

Meanwhile,

- the book is still being sold and read;
- it's likely that a lot of readers are unaware of the problems;
- it's not at all obvious how readers are supposed to become aware of the problems;
- the quality of all the other chapters is anyone's guess;
- there's no timeline for an updated edition that I'm aware of; and
- UC Berkeley is tarnishing its reputation by not getting to the bottom of it.

Therefore, I'm asking you to please reconsider initiating a formal investigation.

### **UC Berkeley:**

We have completed the inquiry into Mr. Guzey's allegations to our satisfaction. I don't wish to go into the weeds either in order to contest any of your statements, especially given the current crisis situation we are all experiencing, so I will need to conclude our conversation here. I hope that you are staying in good health.

### **Me:**

Ok. Thanks, you too :)

### **Me (a few days later):**

As I've slept on it, I don't feel good about putting this issue to rest. So I'm thinking about publishing a write-up (including our full email exchange for transparency).

I can't immediately see any problems with making our conversation public, but I wanted to run it by you in case there's anything I've missed. Do you have any thoughts on the matter?

### **UC Berkeley:**

My understanding is that my university email communication is a matter of public record, and I try always to communicate with that standard in mind. There is no prohibition that I know of against publication of my emails with you, in other words. I would just ask that you contextualize my communications in a transparent and accurate way. I do not mean to enter into a debate on the issue of misconduct, but I have followed up on the allegations against Walker according to our policy, as I would with any allegations of misconduct, which we take seriously.

Thank you for asking.

## Me:

My understanding is that my university email communication is a matter of public record, and I try always to communicate with that standard in mind. There is no prohibition that I know of against publication of my emails with you, in other words.

Great, thanks for clarifying that.

I would just ask that you contextualize my communications in a transparent and accurate way. I do not mean to enter into a debate on the issue of misconduct, but I have followed up on the allegations against Walker according to our policy, as I would with any allegations of misconduct, which we take seriously.

Yeah, I'll try to be as accurate as I can and be clear about what is fact and what is opinion. Also, I think we should expect a lot from institutions and very little from individuals. Therefore, I view this as a series of institutional failures, not personal ones. So I'll do my best not to be personal.

## Me:

I've written a draft and attached it to this email. I wanted to run it by you in case I've made any errors or been unfair in any way. So if you have any comments, please let me know.

## Conclusion

I would love to do a root cause analysis to figure out what went wrong where, but I unfortunately don't have the necessary access or resources. And, given the incentives involved, it might not be possible. So I'm left with speculation, which I'll refrain from here. That said, I think it's pretty clear that UC Berkeley needs to step up their game. For the publishers to do *anything at all* would be a great start.

## Acknowledgements

Thanks to Alexey Guzey<sup>16</sup>, Andrew Gelman<sup>17</sup> and Anna Hoiseth<sup>18</sup> for reading drafts of this.

From: <https://yngve.hoiseth.net/why-we-sleep-institutional-failure/>

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# SET, SERIES, ARCHIVE, CATALOGUE, LITANY, LIST

\* post45.org \* 10 minute read \*

For this forum, we were asked to reflect on "how we write (well)." <sup>1</sup> To make sure there was no evading or finessing the first person plural, we were encouraged to chose a passage of our own writing as the occasion to think about two key questions embedded in our brief: 1) what is changing about good academic writing (how do we write well *now?*) and 2) how are new platforms or audiences changing the nature of scholarly writing (*for whom* do we write well?).

The challenge of taking my own writing as an example made me think back to what I learned in graduate school, the time when good writers either deepen (by precision, perspective, historical nuance) or weaken (by jargon, specialization, bad scare quotes) their critical prose. One of the first scholarly rules I remember —a rule that I thought would help me distinguish my best professional writing from the "merely essayistic" (scare quotes!)— had to do with lists. Scholars, I learned, define lists precisely: if a set includes seven items, name all seven; if three, then three; if infinite, then define the set as an infinite series, using a clear logic of extension or recombination. Do not settle for "and so on" or "etc" or even the dressy "*inter alia*." List-making and set-definition are crucial to academic

writing and probably always have been. Finite lists manage the core scandal of our discipline, which takes place routinely when a few pungent or shiny examples—usually laid down in rhythmic triads—create the aura of a closed case and the momentum of rhetorical authority. A charismatic list allows us to generalize from word or figure to text or genre, from text or genre to social or historical claim.

This set of reflections on writing turned me back to a single sentence that I pulled out of the weave of Eve Sedgwick's prose in 1992. That's when I was trying to learn to write well, in part from her. I kept coming across little word-bombs of revelation in her pages, like the time I found her discussing "daring and prehensile applications" of our ideas: prehensile? like a monkeytail? can our ideas grip like that? When I turned chapter drafts in to my dissertation committee, I knew that she would later ask me, with her trademark quizzical head-tilt, "Why did you write THAT?" I tried to prepare for that moment. I stopped to notice a sentence in Sedgwick's essay "Nationalisms and Sexualities in the Age of Wilde," where she seemed to pile the words together in a very particular way. Here she is musing over the oddity of sitting in a Buffalo airport reading a *USA Today* weather

map that allows her to see—in florid gradients of orange, yellow, and green—everything one might want to know about the conditions in Phoenix and Miami but leaves Toronto—less than a hundred miles away—adrift in a gray-scale data-void called Canada:

The very blandness of the “American” compacting of borders - the, as it were, bad pun between the name of a continent and the name of a nation - how much must it not owe to the accidents of a history of geographic, economic, imperialist entitlement, a path into “nation-ness” no more “normal,” no more *as opposed to* the same set or even the same *kinds of* definitional others, than that of the nation-ness of Canada, the different nation-ness of Mexico, of the Philippines, of the Navajo Nation (within the U.S.), of the Six Nations (across the U.S.-Canadian border), the nationalism of the non-nation Quebec, the non-nationalism of the non-nation Hawaii, the histories of African-American nationalisms, and so forth and so forth.<sup>2</sup>

I read over this sentence three times; even years later, I found myself trying to recreate its paratactic spell in my own writing. The funny part about this quest is that it is actually quite a bad sentence—neither especially graceful nor logically exact, though Sedgwick’s critical prose is so often both of those things. Here the open-ended clausal breaks make the syntax hard to follow. The negatively framed rhetorical question bumps along like a jalopy to the point where we lose

track of it. And it does the one thing I was teaching myself not to do: it leaves a list or set or series in the uncertain territories of the “and so forth and so forth.”

Of course literary academics live in the land where, on Tuesday, we teach students the rules for writing well and, on Thursday, we show them that great writing comes from broken rules. So it is maybe of only passing note that Sedgwick’s sentence is bad yet indelible. She is performing a trick of scholarly prose in ways that are at once ingenious and ingenuous—showing her hand, telling us that this list is all the evidence you need, but not nearly all the evidence to be had. Sentences built of lists have a special power and therefore demand to be written well. Their litanies have to shimmer and resonate so that they can set up an independent existence, drawing attention away from the subject to the predicate, from actions to objects. Stylistic momentum is what matters here: we can cinch or clinch an argument by setting out one definitive array of artifacts or by unspooling a recombinant sequence of possibilities. The Sedgwick sample is a special kind of catalogue—not an inventory of like things, but a code-run of permutations with a discriminating purpose (nation/not/nationalism/not).

That is the special effect I wanted to capture in my own writing. When I prepared for this panel, I found a

sentence in my own work, published twenty years after I read Sedgwick's, and I recognized the line of influence:

In the chapters that follow, we will find the narrative logic of arrested development in works by semi-English imperialists (Kipling), English anti-imperialists (Woolf), English semi-imperialists (Wells), non-English anti-imperialists (Jean Rhys), non-English semi-imperialists (Olive Schreiner), non-English part-time anti-imperialists (Conrad), as well as in Irish and Anglo-Irish writers of disparate backgrounds, views, and temperaments (Wilde, Joyce, Bowen).

3

This brief litany describes the range of my literary dataset and their angle of remove from an English ideological core. My invocation of Sedgwick tries to imply the power of the set or series by making a recombinant and rhythmic appeal to bi-modal logic.

In then end, my sentence, like Sedgwick's, turns on the crucial alignment between what a sentence can include and what a nation can include. She throws into relief the arbitrariness of the Canadian border by enacting the porousness and garrulousness of language—even of syntax, which can, like the weather, pour across the borders that we have set. An unruly litany of this kind shows us how object lists—whether grounded in grammar or ontology—can make or break a boundary; as in Wallace Steven's "Anecdote of the Jar," artifacts properly set in prose can take

dominion in a wilderness of data. They make and shape the logical and ecological containers which they define from the inside out as content. Arrayed or disarrayed, they can also point to the irregularity of a border. When the borders or containers in question are national cultures or national traditions, then catalogues perform their sentimental inclusions and their violent exclusions with force, even as they appeal to the reader's sense of informal assortment. National litanies, including the famously demotic ones we find in Ginsberg, Melville, and Whitman, exclude in this way even when they are loose and magnanimous. Writing with lists can turn assortments into collections, collections into sets, or sets into series; scholarly control of that process often defines how we write well.

Bogost offers a crystalline case of what happens to scholarly writing when the square action of the sturdy English sentence (subject-verb-object or SVO) becomes the ontographic display (SVOOO<sup>n</sup> or, perhaps more aptly, SV "triple O"). But the syntactical, or, to be more precise, the paratactical phenomenon is not restricted to the new materialisms or thing theory. As humanities disciplines decenter their old canons, the democratization of our primary materials puts pressure on all of our writing to carry its artifacts and archives on its back, to install the dataset in the sentence. More and more, our sentences have to show our scholarly value through the originality

of our objects of study themselves rather than through an original take on a shared text or familiar writer. As the old canons recede, academic style changes, and the catalog-sentence or object-litany becomes even more the expressive channel of good writing. When research projects rely on the charisma of the archive and its objects, rather than the charisma of the exegetical paradigm, lists matter. A stylish list can enhance an old-school interpretive argument, but it can make or break a descriptive one.

Of course, plenty of scholars in literary and cultural fields have suspicions about the claims of animate and mystified objects, and about the empirical turn in the humanities. The stubborn problem of evidentiary wobble between detail and narrative, particular and general, doesn't go away when we shift from the veiled metaphors of the hermeneutic paradigm to the candid metonymies of the forensic paradigm. Even when arrayed in the most apparently random or aleatory fashion, a list, catalogue, or assemblage has at some level to refer back to the total ensemble of (a) culture, recreating the space and the frame, the political and ecological horizons of object-oriented writing. As the Stevens poem would suggest, no jars without Tennessees. For another thing, the accentuation of objects in a paratactic litany arranged, per Bogost, against narrative coherence itself raises the specter of detemporalization, of whether the posthuman is somehow not just the

posthistoricist but the posthistorical. Do sentences that promote objects and decenter subjects produce good writing at the expense of verbs? Do spatial and artifactual arrays strip scholarly writing of its capacity to encode historical action, narrative causality, or time itself? Are lists taking over the English sentence in the academic and para-academic world of prose, just as listicles seem to be displacing articles in the era of Buzzfeed?

I don't think so. And, having to some degree deferred the charge to talk about my own writing by wrapping my example in a set of remarks about the uses of the scholarly inventory today, I will turn back to my own dependence on the trope of the litany, without which I find I do not know how to close an argument. And I will conclude with a self-citation because I want to oppose the logic of "piles of data"—a kind of inductive, anti-narrative, assemblage-driven model for writing good lists—with a few sentences in which the litany is neither additive nor spatial, but temporal and privative:

By objectifying the antihistorical, indeed history-killing, impulses of the Old Man in *Purgatory*, Yeats opens up his last public script to the existential plenitude of pure time—time not used up by history, time not sacrificed to timelessness, time neither hardened nor frozen by the tectonic shifts of western empire and eastern church, neither exhausted nor emptied by the fact of death—nor by

the abolition of the poet's ego, nor even by art's rage for order. At the end of *Purgatory*, the state of things does not merely decline, nor do events simply repeat; no apocalyptic or dialectical transformations are triggered. Moments tick on after the last words are uttered, after the curtain falls, and those grand, gyroscopic Yeatsian motifs of recurrence and repetition, those long-legged themes of ancestral and national declension, are themselves and at last relativized by the unending sweep of time.<sup>7<sup>4</sup></sup>

In this essay, I am describing an aged poet who at last detaches from all his consoling myths in order to confront the problem of a time that cannot be framed or compassed, however capacious. To face it requires Yeats to give up all forms of belonging, all container-contained relations, from the eschatological myths of Irish origin to the apocalyptic fantasies of species extinction. The radical seriality of pure time resists all manner of punctuation and delimitation: it just goes on and on. By contrast, sentences, like essays and books, are periodic: they must come to an end. And archives—the catalog of objects and artifacts that we study—are likewise finite. Our syntax and our datasets meet on the ground of

what we can do with the time that we have to read and write. The "great unread"—the objects we will never know—and the paratactic litanies we use to mourn them can only gesture at the infinite series that is history stretching before and after us. That is a daunting thought, so perhaps it is of some comfort to think about writing well in terms of the historical sense that the humanistic disciplines want most to cultivate in our students and ourselves. That sense demands of us not so much that we always write well, but that we keep writing.

**Jed Esty** is Vartan Gregorian Professor of English at the University of Pennsylvania. He is the author of *Unseasonable Youth*<sup>5</sup> (Oxford, 2012), and "Realism Wars"<sup>6</sup> (2016).

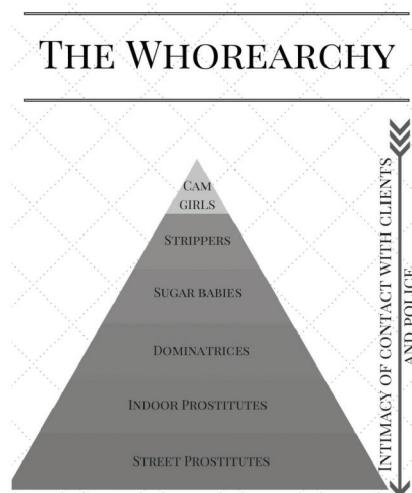
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# LOOKING UP AT THE WHOREARCHY FROM THE BOTTOM

\* street-hooker.com \* Thursday 30 April 2020 \* graceyswir \* 10 minute read \*



Infographic by Monique Duggan

The whorearchy is used to describe the hierarchical difference between the vast number of sex workers based on the stigma they face, how intimate they are with the client and the likelihood of them having interactions with the police. This is theoretical but in reality, it is shown in more hurtful ways. Despite being impacted by the same laws, using our bodies in a sexual way for money, there are many sex workers who look down on other types of sex workers. I don't understand this because we are all fighting the same laws, confronted with the same prejudices, and if the Nordic Model was introduced, we'd all be faced with being evicted by our landlords due to our jobs.

As a street sex worker, I am accused of devaluing local house prices and that I am hurting children. However, a dominatrix is subject to the same stigma by society. They are higher up the hierarchy than me, and I would argue even higher than a sugar baby. Mistress Evelyne, a London based dominatrix faced backlash from her local community and nationally after an article about her was in the Daily Mail. Accusations included that having her in the neighbourhood was driving down local house prices and concerns that children 'will be exposed' to things they shouldn't see. These accusations are not far from what I've been accused of either as a street sex worker. Evelyne was also reported to the police due to the noises coming from her dungeon. Of course, she is not a threat to any child, neither am I!

08:27 17 February 2020

[Tweet](#)

Short and not so sweet this morning.  
Penetrative sex.... good job my  
breakfast had settled and gone.

No I do not offer that. And nobody in my  
circle does. Except the tgirl and  
whoreslut. But they ain't Mistresses.  
Perhaps try the SOME that do allow it.  
Eurgh

Mon, 17 February 2020

Some mistresses allow penetrative sex.... good job my breakfast had settled and gone. I probably won't last very long as I'm sure I'll be on the edge of blowing my mind after seeing your pants down. I bet your dominatrix face stunning in that black onesie stockings suspenders underneath is this something?

[VIEW ALL](#) > 07:59

OK thanks 6812 08:12 Never

And your not referring to a professional dominatrix or mistresses? You have clearly been seeing escorts. I suggest you don't use that word for me

A dominatrix I called out for the whorerachy

This was a tweet I saw one morning from a dominatrix. I stared whilst drinking my tea in shock. For me, this was the first time I had seen blatant shaming amongst sex workers. It is absolutely fine to have boundaries in sex work of what you do and don't offer. In fact, it's something I encourage, but there is no need to shame others along the way. I think it was the 'Eurgh' at the end that got me, as it was some sort of disgusting thing to do. I can only imagine the sentence at the end was 'I suggest you don't use that word for me' as if being an escort is something to be shamed for. I thought this was perhaps a one off, but I quickly realised the issue was more prominent than what I first envisaged.

I couldn't help but think this tweet showed a divide even amongst the dommes. I have seen this a few times, arguing about what is a professional dominatrix and what isn't. Who cares? If one has penetrative sex and a mix of BDSM, dom/sub work etc. then why is

there judgement? I am not a domme so I don't know but from the outside looking in, it seems very odd. After all, we encourage each other to do what's good for us, what we are comfortable with and run our own shit, until someone runs it differently than us.

This is absurd for me looking in on these conversations. Working as an escort in an agency or with my friends, independent or street. There is no 'professional outdoor sex worker', and I certainly don't compare myself when working alongside another sex worker. We do what we do, we earn what we need to in the confines of our boundaries and that's it. Whether that's simply a blowjob or full blown anal fisting. You do what's good for you. I find it upsetting at times that we judge each other over what we do or don't do with our bodies. I saw a recent article from an escort that caught my attention, describing lower-end 'housewife' sex workers as amateurs. I imagine she therefore sees herself as a professional. Personally, I find the idea of a professional sex worker to be problematic. We are not professional sports players, and what are the qualifications to become a professional sex worker? What must I do or not do? Someone may not have the same safety advice or resources, but they're no less of a sex worker.

Of course, these examples give dommes a bad name. Although this is sometimes considered a problem amongst them, they have the largest

platforms to express these views so it attracts the biggest attention. That is not to say they are all like this, because that's simply not true at all. I have met some lovely and incredible dommes who have helped me, been very welcoming, encouraged me, and haven't thought twice about the hierarchy. You will also find some of them have gone up and down the whorearchy but almost too scared to be open and honest about it, in fear of being discredited as a domme.

Replies to @scarlettmonroe\_

Not interested. I don't believe in baring my body on Social Media. If gents wish to see my body, make an appointment when covid19 is over. Guys can take photos when you are on onlyfans & post them anywhere.

I have strong values and morals and I don't believe in being a sheep.

9:13 AM · Apr 23, 2020 · Twitter for iPhone

The whorearchy at play

Of course, this is prevalent amongst other types of sex workers. For example, this tweet was in reference to a question asking why sex workers don't have an OnlyFans account yet.

There are so many things that are frustrating with this post. Almost nobody can wait until covid19 is over due to financial reasons. Not everyone had savings to prepare for a never-ending, world stopping pandemic like you. Hun, you are a sex worker who is talking about having strong values and morals by not showing your body, the same thing that makes you money. You can have strong values, that's fine, but it's usually this argument that is used against you by others, don't perpetuate it yourself. After all, the rest of must be cheap whores with no morals it seems.

## Selling nudes or making content does not remove your morals and values.

This is the what I describe as the 'othering' amongst sex workers. I am not like *those sex workers* who choose to put photos of their bodies online, goodness no! There is no need to be like this. I don't have an OnlyFans and I am a sex worker. I will happily admit this is because I am actually not brave enough to post nudes and videos, nor am I dedicated to the immense work that goes on behind the scenes for online sex workers. It's okay to admit there are strengths in the work of other sex workers, and weaknesses of your own. Those who look down on this are the types of sex workers who I describe as 'M&S personal sexual therapists', and probably say only their lip touches their penis or their index finger. Sorry, but you're probably riding dick as hard as me some days. In the eyes of society, we are both a sex worker.

If you use your body for the sexual pleasure of a client in exchange for money, you are a sex worker. Before you say that by not touching the client, you aren't one, then consider that you will still be impacted the Nordic Model, and other anti-sex worker laws. You can also be evicted from your home by a landlord under anti-prostitution laws. You may not be penetrated by the client but you may penetrate them with a strap-on; if that's not sexual then I am unsure how you would describe your job. We both make Dave, Richard and Michael cum, we just do it in different ways. It

is frustrating when you are already in a community that is marginalised and those within it continue to create division between us. Even worse are those who enforce the hierarchy whilst those at the bottom don't even have time to consider this bullshit because we face the brunt of stigma and anti-sex worker laws, such as fines for solicitation. It distracts from the debate and focus of what we should all be striving towards: decriminalisation.

This is not to suggest that all sex workers are the same. Of course, there are various dangers to each type of sex work that need to be appreciated in their own right. Street workers are more likely to be killed whereas online sex workers are more likely to be doxxed, and have their content sent to their employers, friends and family. However, what unites us all is the stigma and shame we face by society and how laws can punish us. We are a marginalised group but despite that, we are incredibly varied. Where there is difference amongst people, there is difference amongst sex workers because we walk amongst you in every walk of life. However, despite the commonality between us, I, and many other street workers have been at the brunt of the whorearchy, I think a lot of sex workers have at some point and I can only ask, what purpose does it serve? I just don't understand the reason for it.

I realise I am blocked by sex workers I have never even engaged with. Of course, you can't please everyone, and

that's fine, but I am unsure what is so different between us. One lady quite honestly told me that she thought I was ruining the community because I said I disliked sex work, that I hated street work, and would support exiting the industry. What do you want me to say? I am not going to lie to please the agenda you portray of your experience in sex work. I am told that I am simply fuelling the abolos. The reality is, sex workers don't have to walk around with a happy face when they face serious violence because you are scared Bindel will jump on it. I will continue to argue that street sex work is crap, and it's true that we are more likely to be arrested, stigmatised and assaulted. These should be reasons to highlight for decrim, not lie about so we can all play happy families. I sometimes wonder whether we are at the bottom of the whorearchy because of how much we dislike our job too.

When I am working with other street sex workers, I don't mention that I have also done indoor work because for some, it makes them feel like I am judging them. They assume I live a lipstick lifestyle that is full of glamour and money but it's not their fault, I sometimes feel this way too about sex workers higher up the hierarchy than me. Of course, on reflection I know it's perhaps due to marketing, and I never truly know the life of someone else, nor is it any of my business. These sentiments are so strong that even when working beside them, it can put them off me. I am not angry at them, I'm upset at the reasons why

they feel this way in the first place. For me, sex work is the same regardless of the environment you do it—whether that's in the back of the car or in the rich man's bed at an outcall. The only difference is that not everyone is afforded the same opportunities such as access to a phone with internet or the ability to run a small business, nor does everyone have a place to work from.

The problem with the whorearchy is that it distracts attention from those who need support the most, and enforces the attitudes that prevent them from accessing support. Many at the bottom of the pyramid don't engage with the sex worker community because they're too stigmatised even amongst sex workers. As a result, they rarely get to defend themselves. We isolate further into our own small knit communities, or avoid other types of sex workers in fear of further judgement. When I worked only indoor, it was saddening to attend drop-in and see a street worker recoil when I said I was indoor. It's not the time nor place to break down the whorearchy and deconstruct it, assuring them I'm on the same side. However, they instantly ask how much money I charge, how much I earn and spend my money on. The thing is, I've worked both indoor and outdoor, both have their pros and cons, yet nobody wants to recognise the benefits of outdoor such as quicker turnaround times, less emotional labour and fewer expectations.

The whorearchy is the worst thing about the sex work community. I hate it so much because it is one of the very reasons it silences street sex workers and makes us feel ashamed. It is why when I write an article about drug use in sex work that people inbox me instead of openly supporting it because they fear judgement by their own community. For some people, they may have no friends or family after being rejected by them due to being a sex worker, and they rely on other sex workers for support. Sex workers isolate further and further into their own community to protect themselves from stigma and shame in general. To then have the very same people judge you or criticise how you sex work is hurtful.

You have to remember, it is historically street sex workers who have relentlessly campaigned throughout history for sex worker laws, faced the biggest brunt of the police, morality campaigns, usually the victims of mass killings such as Yorkshire Ripper & Stephen Wright. We were the ones forced into quarantines to prevent spreads of venereal diseases, and were outright abused by doctors as we were forced to undergo testing, then imprisoned. Street sex workers are not dirty, worthless, junkies or whatever you think we are. We are sex workers just like you and love the same way as you too.

I always keep my blogs free because advocacy and tackling stigma is my main goal but if you wish to support

me, please consider:

From: <https://street-hooker.com/2020/04>

/30/looking-up-at-the-whorearchy  
-from-the-bottom/

# GENERATIVE DESIGN IS DOOMED TO FAIL

\* danielldavis.com \* Thursday 20 February 2020 \* About \* 16 minute read \*

A concerned Autodesk representative pulled me aside at an event recently. “I read your article,” she began.

I tried to recall whether I’d said anything controversial. But my most recent article was relatively tame, just 1,300 words in Architect Magazine about algorithms generating building layouts<sup>2</sup>. If anything, it was complimentary of Autodesk.

Around us, people at the conference were discussing the industry’s most pressing issues—robots, automation, climate change. The representative leaned in to reveal hers: “I noticed you didn’t mention generative design in your article.”

The representative worked for Autodesk’s communications team. As you’ll be aware, Autodesk has been ramping up its efforts to brand and promote generative design, putting out a series of videos<sup>3</sup>, articles<sup>4</sup>, and presentations that tout the benefits of the generative process. Others in the industry have followed suit, announcing their own generative design tools in superlative laced press releases. None of this is new. People have been peddling generative design as far back as the 1980s. But it never had the clout of someone like Autodesk. After years of never really

going anywhere, suddenly everyone is talking about generative design. Suddenly it feels inevitable.

The Autodesk representative seemed taken aback when I told her that I didn’t believe the hype. That I avoided using the term ‘generative design’ in the article because I didn’t think it was worth promoting. That it was a distraction. A white whale. That it wasn’t the future of design, or anything. That it was a dead-end. That something more significant was happening. That I needed more time to explain.

On the surface, generative design is an enticing vision. Rather than employing a designer to laboriously create a design concept, you can instead use an algorithm to quickly generate thousands of options and ask the designer to pick the best one. Effectively, the designer becomes an editor. They specify the goals of the project, an algorithm churns out an array of options, then the designer returns to select the strongest idea, and—voilà – you’ve got a building. Since the algorithm can produce countless design concepts, the designer can, in theory, consider more possibilities than they would on a typical project, improving the chances of finding an optimal design

or discovering a novel solution. A better design with less effort, what's not to like?

Some of you are going to disagree with how I've characterized generative design. In the current vernacular, the term 'generative design' has a reasonably loose meaning. This isn't unusual—other technical terms like 'parametric' or 'machine learning' have grown more vague as they have become more popular. In the case of generative design, the word 'generative' is often confused as a catch-all for 'generated'. Throughout this article, I'm going to refer to generative design as a three-stage process where (1) designers define the project's goals, (2) algorithms produce a range of solutions, and (3) then designers pick the best result. Although you might quibble with this definition, this is how Autodesk defines generative design today, and it's what many people are currently pushing as the future of design. For the purposes of this article, I'm only focused on this prevailing definition (if you think this process shouldn't be called 'generative design,' if you'd rather call it optioneering or something else, you can change the name used in this article<sup>5</sup>).

Whatever you want to call it, I'm deeply concerned that many in the industry are advocating that generative design is the future of architecture. As I'll explain in this article, once you get beyond the marketing hype, there are real

technical and human reasons why generative design's three-step process is doomed to fail.

## The Worst Way to Write an Email

To understand the absurdity of generative design, I think it helps to imagine generative design in a different context, to see it as a naked idea without the baggage of the architecture industry.

Consider email. According to McKinsey<sup>6</sup>, the average worker spends about 11 hours a week reading and answering emails. Each email is hand-crafted, letter by letter, word by word. Clack, clack, clack. It's easy to see why talented people hate doing this menial work.

So why not reinvent email? Rather than typing out each email, why not have an algorithm generate the first draft? Or a hundred first drafts? Why not make a generative email program? You pick the subject, an algorithm writes some options, you read them, choose the best, and hit send. Not only would you save time, but you'd also probably end up sending better emails because you can explore more possibilities and spend longer considering what you're saying. What's not to like?

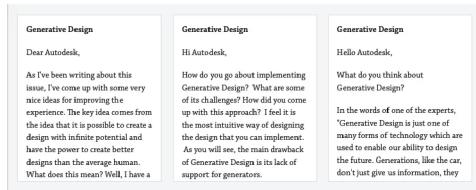
All of this is technically possible. In fact, I've mocked up a quick prototype below.

# GenerativeMail

Created with gpt<sup>2</sup><sup>7</sup>, gpt2 Cloud Run<sup>8</sup>, and Paracord<sup>9</sup>

## Why Generative Design Doesn't Work

I imagined that it'd be instructive to see generative design used in the most ridiculous way possible. But as I ran the generative email program for the first time, I was no longer sure if it was such an absurd concept. I mean, sure, most of the emails were incoherent, but every now and again one of them would be unexpectedly erudite. In those moments, you could see the potential. You could imagine that with better algorithms, an improved interface, and faster computers that this crazy idea might actually work.



Writing about generative design using generative design.

Generative design often appears close to working. It's been that way for decades. Time and time again we're strung along by seductive demonstrations and fooled into thinking we're on the cusp of a breakthrough. These demos are easy enough to create. Take an algorithm that spits out hundreds of random designs, develop an interface to display them, combine, and you've got

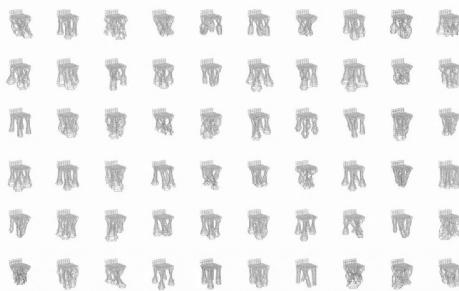
a passable mockup of generative design. Want to truly impress? Apply your prototype to a simplified design problem and explain that it'll work just the same in a complicated, real-life situation. If there are any concerns about the quality of results, draw upon your inner techno-optimist to explain that the algorithm will improve with time. It's that simple. It's the sort of thing you can create in a weekend, on a lark, to illustrate a blog post.

While it's trivial to show that generative design is possible, it's much harder to take the next step and show that generative design is useful. In fact, it rarely happens. This is the real challenge of generative design: going from the plausible to the practical. Up until now, we've just been doing the easy bit, we've been showing that it's possible. This feels like progress, yet the hard part is still to come. I don't want to be a downer, but I don't think we'll get there. By my count, there are 6 major reasons why generative design is unlikely to progress.

### 1. You're on the hook for generating the options

The way generative design is sold, it often appears that a designer only involved in defining the project's goal and picking the best options. In reality, the designer is also responsible for creating the algorithm that generates the plans. Which is no small feat.

In the generative email program, the text is written by an algorithm called GPT-2<sup>7</sup>. This program, developed by OpenAI<sup>10</sup>, builds upon decades of research on neural networks and natural language processing. The result is an algorithm that can write everything from New Yorker articles<sup>7</sup> to Harry Potter screenplays<sup>11</sup> (GPT-2 was so convincing that OpenAI initially held it back, calling the software ‘too dangerous to release<sup>12</sup>’ because of its ability to automate the production of fake content).



These chairs look similar because the underlying generative algorithm is limited in what it can produce. If you wanted to create a chair that looked different, you’d need to spend time rewriting the generative algorithm (source<sup>13</sup>).

There is no GPT-2 for buildings. That is to say, if you’re using generative design, there is no pre-built mechanism for generating all the design options. Instead, you have to create your own system. From scratch. This is a bit like creating a factory that manufactures design schemes. If the factory is repetitively making a reasonably uniform product, then it’s relatively straightforward to setup. But if you want to produce a lot of variation, then it can get really complicated. In

many cases, it will take more time and skill to set up the factory compared to doing the work manually. To avoid this complexity, people tend to limit what the factory can produce, which is why demonstrations of generative design often churn out hundreds of similar-looking design options. Rather than exploring the full range of design outcomes, you end up exploring what the algorithm can create. Often this produces less exciting outcomes and takes longer than you’ve been led to believe.

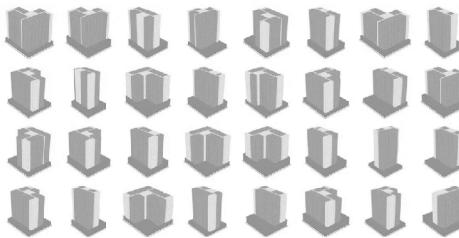
## 2. Quantity doesn’t substitute for quality

If your boss asks you to sketch out a proposal, what is the right number of plans to produce? Perhaps you’d return with 3 to 5 ideas. If you’re feeling confident, you might advance just a single proposal. But you’d never, in any situation, come to your boss with a presentation containing 100 different schemes. It’d be absurd.

Yet, with generative design, we routinely generate hundreds of different options. And we celebrate this like it’s a virtue. The thinking is simple: the algorithms can’t tell good ideas from bad, but they can create designs incredibly quickly, so if we rapidly produce hundreds of options, we increase the chances of inadvertently generating a good design. Effectively, we buy more lottery tickets.

The deluge of options obscures the fact that most of the outcomes aren't viable. In the case of the generative email program, if the algorithm was any good, it'd be able to select the 3 to 5 most compelling drafts. If it was really confident, it'd select just one. But instead, we have algorithms that thoughtlessly create hundreds of options. This isn't a virtue, it's not the future, it's a byproduct of lousy software. The fact of the matter is: one hundred shitty designs aren't anywhere equivalent to one considered design. If your software was any good, it'd produce fewer designs, not more.

### 3. Comparing options is harder than it looks



Design options from Parafin (source<sup>14</sup>).

Once you've generated all of these options, a person needs to select the best proposal. This is one of the main appeals of generative design—the algorithm handles the laborious work of creating the options, and all you have to do is sit back and pick your favorite.

It sounds leisurely, but it is actually difficult work. Ask any professor: would you rather grade 100 student essays or write one article of your own? Truth is, it takes effort to

consider a design option seriously. And the challenge of evaluating different options only increases as the output becomes more involved and more complex. For example, 100 emails can be skimmed relatively quickly, but 100 books would require a lot of reading. Now imagine comparing 100 different buildings, I mean really comparing them, not just skimming through the images—oy vey!

Further complicating things, humans hate having too many choices. More choices give us more opportunities to make the wrong decision (which is something we fear), and the choices make it cognitively challenging to recall options and draw comparisons. This is sometimes called 'overchoice'<sup>15</sup>, or 'the paradox of choice'<sup>16</sup>. Research shows that we particularly dislike being given a lot of similar alternatives<sup>17</sup>, as is often the case for generative design, since there is no clear winner, leaving us to make a seemingly impossible choice between nearly identical options.

To put it simply, presenting designers with a lot of options is generally a terrible idea. Designers will find it stressful, they'll struggle to make meaningful evaluations and comparisons, and it might not save as much time as you'd expect because it's such an involved process to do well.

## 4. What you can measure isn't what matters

Proponents of generative design argue that having too many options isn't a problem because you can always hide the bad ones. You just need to measure the performance of each option and remove anything that doesn't match the designer's performance criteria.

In the generative email program, you can filter the emails by length. Admittedly, the length isn't the best performance metric, but it's easy to calculate. Perhaps in the future, we'll be able to measure more critical factors, like the text's persuasiveness or wittiness. But it's not guaranteed that we'll get there. Just because you can count the number of words in an email, doesn't mean that one day you'll be able to measure these more visceral concepts.

In the field of architecture, there's no consensus on what constitutes good architecture and no established ways of measuring it. So we measure something else. In the 1960s and 70s, a lot of research focused on evaluating buildings in terms of walking times between rooms, which was easily calculated but not particularly important. Today, we might look at solar gain or view analysis, which is a component of architectural performance but not the full story. Perhaps in the future, we'll be able to

quantify other more visceral aspects of architectural performance, but I'm not holding my breath.

For people using generative design, this puts them in a bind. They can either use these arbitrary metrics and end up optimizing for the wrong thing, the thing that can be easily measured. Or they can ignore the metrics and wade through a lot of unfiltered options. I don't see this situation improving any time soon—architectural performance is so complicated that we may never get to a place where we can quantify it and use it as a filter.



Apartment layouts are compared using solar potential, revenue, and program, which are easily calculated measures of performance but not the full picture. It is easy to inadvertently optimize for the calculable rather than the important (source<sup>18</sup>).

## 5. Designers don't work like this

Generative design simplifies the design process into three steps: briefing, ideation, and deciding. This is a gross simplification of what architects actually do. It feels like a caricature cooked up to tease designers, 'oh, you know those melodramatic architects, all they have

to do is take the brief, create a bunch of options, and pick their favorite, what's so hard about that? Honestly, it's insulting.

Study after study has shown that designers don't follow a linear process<sup>19</sup>, that design is necessarily messy and iterative. You experience this writing emails. You'll write something down, re-read it, realize it sounds wrong, revise, re-read, edit, and iteratively work towards a final draft. At WeWork, Andrew Heumann recorded architects as they worked<sup>20</sup>, and observed a similar pattern as he watched designers rapidly cycle between macro and micro changes, between the broader project objectives and the specific implementation.

In demonstrations of generative design, the iterative nature of the design process isn't apparent because there are no real stakes. You don't have the pressure of design reviews, the insanity of client revisions, budget cuts, and public submissions. You're playing a designer on easy mode.

On a real project, you'll never get it right the first time—the generative design algorithms aren't good enough, and the circumstances of the project will change once you've created your first draft. So you have to make revisions. And generative design doesn't accommodate revisions since it assumes the design process only moves forward. To make a revision, you either need to throw everything out and start the generative design

process again, or you can abandon using generative design and make the change manually. Either way, generative design makes it hard for designers to work iteratively.

## 6. No one else works like this

The most damning indictment of generative design is that you don't see it used in other creative fields. Adobe isn't holding press conferences saying that generative design is the future of graphic design (InDesign will just be an interface where you upload your text, the software creates 100 different page layouts, and the designer picks their favorite). Apple isn't pushing generative design for Final Cut (upload your raw footage, the software edits 100 different films, you watch them all, and pick your favorite). Microsoft isn't adding generative design to Word. Autodesk isn't even hawking generative design to their other key markets, such as media and entertainment.

To be fair, some things on the market today that resemble generative design. Spotify, for instance, will automatically generate several playlists and let you pick your favorite to listen to. But Spotify has an advantage, they can build this once and sell it to millions of customers, they're not creating a one-off algorithm to redesign their office. Additionally, the interface is quite different to what we've been calling generative design—you don't give Spotify a brief, and the software only

produces a handful of carefully curated options (it's not randomly putting songs into hundreds of different playlists).

The screenshot shows a flight search interface with the following details:

- Round trip, 1 passenger, Economy
- From: New York, To: Melbourne
- Date: Sat, Mar 7, Return: Wed, Mar 11
- Bags, Steps, Airlines, Price, Times, Connecting airports, More
- Flight grid, Price graph, Nearby airports

**Best departing flights:**

Flight Details	Duration	Price
5:25 PM - 9:50 AM <sup>20</sup> Alaska Airlines - Operated by Delta Air Lines	24h 28m JFK-HNL	1 stop 15 12hr LAX \$1,064 round trip
11:30 AM - 6:45 AM <sup>21</sup> Alaska Airlines	27h 10m JFK-HNL	1 stop as 15hr SFO \$1,180 round trip
6:25 PM - 9:50 AM <sup>21</sup> Air Canada	23h 20m YVR-VNL	1 stop 15 12hr YVR \$1,357 round trip

Flight booking websites essentially follow a generative process, you enter the brief (dates and destination), it creates dozens of itineraries, and you select the best combination. But is it the future of design?

The only place that I've really seen generative design thrive is on flight booking websites. These websites essentially take you through a generative process: 1) you specify the dates and destination, 2) the software generates dozens of different itineraries, 3) and you filter the routes by time, cost, and stopovers, and then select the best one. It works well. But anyone that's used Google Flights<sup>21</sup> and thought that it'd make a good design interface is out of their fucking mind.

## If not generative design?

Generative design is our industry's white whale. We've spent years hunting it with money, PowerPoint slides, and armies of interns. You get the sense that we're within striking distance, and yet we've never landed it. It feels like we've made progress, and yet there are seemingly

insurmountable challenges ahead. It feels possible, and yet never quite practical.

My concern is that many companies have jumped on the generative design bandwagon, swept up in the mania, never pausing to consider why this hasn't worked previously or why other design industries aren't onboard.

A lot of this would be avoidable if we had a better understanding of how design actually gets done inside architecture firms. Truth is, we know shockingly little about how design happens—especially in a digital world. As a result, people end up prophesizing about the future of the design, based not on an understanding of the design process, but on an understanding of the technology. Often this comes with fairly naive and condescending assumptions about the work that designers do, which makes concepts like generative design seem reasonable, perhaps even desirable.

Until we get to a point where algorithms replace designers (which may never happen), algorithms will only be practical if they work with humans. The real challenge isn't the technology, it's the interface, it's how the algorithms fit the designer and their process. Generative design asks designers to change this process, to follow a stilted three-stage procedure.

To me, a more fruitful path seems to be taking the existing process and finding ways to enhance it with

algorithmic smarts. Consider email. The process is similar to typing a letter on a typewriter, except you're surrounded by spell-checkers, predictive keyboards, smart compose functions, bots, spam filters, and email prioritizers that all work alongside you, assisting, guiding, and bettering your writing. Creators of other design tools, such as Adobe, have gone in a similar direction, developing algorithms that work within existing design processes. In Photoshop, for instance, Adobe has developed targeted tools that automate specific procedures (such as content-aware fill<sup>22</sup> and smart object selection<sup>23</sup>). The designer works in a familiar manner, but computation is helping accelerate tedious tasks and guiding the user through challenging decisions.

In the end, I get the appeal of generative design. It's alluring, captivating, and perhaps even inspiring. But generative design's problems with choice overload, imprecise metrics, and a lack of design integration are so core to how it operates that they're probably insurmountable. Or at least not easily solved by the usual trio of proposed solutions: better algorithms, an improved interface, and faster computers. Ultimately, I worry that generative design has become a distraction. I'm left wondering what might have happened if we were guided by the process instead of the technology.

*I'd like to thank Andrew Heumann<sup>24</sup> and Nathan Miller<sup>25</sup> for their thoughts and comments on an earlier draft of this article. I'd also like to apologize to all my friends working on generative design applications—I love you all.*

*SEC Disclosure: I own a small amount of Autodesk stock because ultimately I have more faith in Autodesk's marketing team than any of the arguments in this post. Nothing in this article should be taken as investment advice.*

From: <https://www.danieldavis.com/generative-design-doomed-to-fail/>

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# SOCIETY GLENN HENDLER

\* keywords.nyupress.org \* Glenn Hendler<sup>1</sup> \* 12 minute read \*

The keyword “society” is generally used in academia and everyday life to refer to forms of human collectivity and association, but the scale and values of the formations referenced by the word—and its adjectival form “social”—vary widely. When we refer to Twitter and Facebook as “social media,” the term is roughly synonymous with “interactive,” a word that at its narrowest refers to exchanges between discrete individuals. But when mainstream media outlets and politicians assert that the spread of social media is somehow responsible for phenomena ranging from the Arab Spring to the August 2011 London riots, from Occupy Wall Street to so-called flash-mob attacks in U.S. cities, they are claiming (plausibly or not) that interactive technologies enable political participation and are linking the word to broader and more explicitly political usages such as “social justice” and “social movement.”

The term’s wide range of connotations was already evident in the classical Latin *societās*, which according to the *Oxford English Dictionary* could refer to the “fact or condition of being associated for a common purpose, partnership, body of people associated for a common purpose, trading company, partnership in war,

alliance, state of being associated with others, fellowship, communion, joint pursuit, joint enjoyment, close relationship, connection, affinity.” The term later developed a connection with religious community, as in Society of Jesus (Jesuits) and Society of Friends (Quakers). Current usage has continuities with each of these connotations, as the term can reference organizations with specific agendas (the American Society for the Prevention of Cruelty to Animals) and communities delimited by an ascribed characteristic such as national affiliation or social class (American society; high society). We “socialize” freely with others, but we are also “socialized” into normative patterns of behavior shaped by larger legal and political institutions. High school students discuss society in social studies classes; colleges offer majors in sociology; and many universities organize their faculties around divisions between the social sciences, the natural sciences, and the arts and humanities. In political discourse, “civil society” is distinct from the state, yet “social welfare” programs are often portrayed as an expansion of state power, if not an avatar of “socialism.”

As Raymond Williams (1976/1983, 291)<sup>2</sup> notes, “society” thus names both a generalization (“the body of

institutions and relationships within which a relatively large group of people live") and an abstraction ("the condition in which such institutions and relationships are formed"). Motivating both the generalization and the abstraction is the sense that there are limits to the presumption that the individual is the sole agent and object of human action. As such, the term may imply both freedom and constraint. The latter, repressive connotation is exemplified in Ralph Waldo Emerson's (1841/1990, 151)<sup>3</sup> claim that "society everywhere is in conspiracy against the manhood of every one of its members." This formulation evinces a reductive understanding of society as an impersonal force that produces "conformity" by enforcing conventional "names and customs" on the otherwise free (white and male) individual; it also greatly simplifies the processes through which individualities and subjectivities are formed. This stark dichotomy between "individual" and "society" has structured and stunted much U.S. popular thought and intellectual life. In contrast, society is generally conceived of in American studies and cultural studies in a more nuanced way as a *structure*, a principle or set of principles that work to organize human diversity into identifiable collectivities. Such thinking starts from the premise that individual agency is socially constructed even as the world is made and transformed through individual and collective social action.

The idea that society can be a discrete object of analysis or study has a shorter history than one might expect. Of course, writers have long commented on human association, casting collectivity in terms of the *polis*, the body politic, or the commonwealth, to name only three of the more familiar terms. But it was only in the eighteenth century that thinkers began to isolate society as an object of analysis and to study it systematically. This new focus on the social can be traced to the French, Scottish, and North American Enlightenments, particularly the works of *philosophes* such as Voltaire and the Baron de Montesquieu; "Common Sense" philosophers David Hume, Adam Ferguson, and Adam Smith; and Anglo-American political radicals such as Thomas Jefferson, Thomas Paine, and William Godwin. In the early nineteenth century, these theorizations of society were increasingly mapped onto concrete populations, institutions, and activities by classical sociologists such as Henri de Saint-Simon (1813/1965)<sup>4</sup> and August Comte (1858)<sup>5</sup>. Saint-Simon proposed that "man" could be understood using a methodology modeled on the natural sciences and called "social physiology," while it remained for Comte to name the "science" of "sociology" in 1838 and then to systematize the predetermined stages through which all societies developed and to draw an analogy between societies' development and that of organic, usually human, bodies. Comte argued that the sociologist, like the physical

or natural scientist, could produce knowledge about society that would allow technocratic elites to maintain social order while simultaneously advancing human progress (Hall and Gieben 1992a;<sup>6</sup> Gulbenkian Commission 1996;<sup>7</sup> Wallerstein 2001<sup>8</sup>).

The question remained to what purpose such social knowledge would be put. Comte's technocratic leanings prefigured the increasing prevalence of positivistic research methods across the social sciences. Positivism treated social actions and relations as taking place within a relatively stable system or field organized through predictable laws. Aided by the rise of statistical analysis, the pursuit of these laws often resulted in normalizing forms of knowledge since exceptions to social patterns could be treated as deviations from the norm, in both the moral and the statistical sense (Poovey 1998<sup>9</sup>). Although the term "statistic" shares an etymology with "state," both governmental and nongovernmental organizations quickly learned to deploy statistically generated social facts to support their arguments and to legitimate their existence (P. Cohen 1982<sup>10</sup>). For instance, New York's city government hired William Sanger in 1855 to produce a statistical study of prostitution (Stansell 1986<sup>11</sup>). Temperance and antislavery activists similarly relied on statistics and social analysis to bolster their claims, thus emerging as an early "social movement" that saw society as a system that required transformation. In each of these cases, the production

of social facts served to constitute widespread practices—vagrancy, prostitution, drinking—not as individual moral failings but as social problems. As deviations from social norms, such activities became sites both of governmental and (quasi-governmental) intervention and of political struggle among diverse social agents and movements (Foucault 1991<sup>12</sup>).

Even as these positivist forms of social knowledge were being instrumentalized by various state and nonstate organizations in the late nineteenth and early twentieth centuries, sociology was gaining institutional status as an academic discipline. Herbert Spencer, the leading purveyor of "social Darwinism," published the first volume of his *Principles of Sociology* in 1874–75<sup>13</sup>. Among the earliest practitioners of sociology in the United States were Lester Frank Ward and William Graham Sumner, both of whom were influenced by Spencer. The first course with "sociology" in the title was taught at the University of Kansas in 1890, and the first Sociology Department was initiated at the University of Chicago in 1892. Émile Durkheim and Max Weber were leading figures in a similar institutionalization at European universities. Sociology developed an extra-academic presence as well. Opened in 1913, the Ford Motor Company's "sociological department" provided aid to the company's poorest workers, though only after requiring regular "home visits" to ensure that a

worker's domestic life was "worthy" of support and that the mostly immigrant workforce was being properly "Americanized." Here again sociology normalizes social behavior, this time by linking normativity to productivity.

The analysis of society was not limited to one particular discipline or methodology. Nor did many of the major social theorists of the nineteenth and twentieth centuries consider themselves sociologists. Variants on the word "society" appear today in the names of several disciplines and subdisciplines that cut across the boundaries of sociology as a field, including social history, social psychology, social work, and social theory. At the same time, the overarching rubric of the social sciences suggests that "society" remains a metacategory capable of organizing the study of markets (economics), governments (political science), and individuals (psychology) into a conceptual and institutional singularity. Of course, these objects of study are not really discrete things: an economic theory that ignored the importance of the state in constructing and maintaining markets would be impoverished at best, as would a theory of the individual that neglected the roles of markets and governments in shaping human agency. For this reason, much energy in the past few decades of social theory has gone toward critiquing conceptions of society as a totalized system, especially when that system is seen as wholly structured and

determined by a subsystem—the economy, for instance—that is treated as if it were external to the social. One influential thread of this critique has taken place in the languages of structuralism, poststructuralism, and deconstruction, including Ernesto Laclau's argument about "the impossibility of society" (1990, 89–92<sup>14</sup>) and Cornelius Castoriadis's claim that society is "not a thing, not a subject, and not an idea" but an "imaginary institution" (1987, 207<sup>15</sup>).

Many similar critiques of society as a concept derive from debates on the left, which range from intellectual tendencies described as neo- and post-Marxist to welfare-state policy analysts and grassroots community organizers. But they also resonate with attacks from the opposite end of the political spectrum, such as British Prime Minister Margaret Thatcher's (Keay 1987, 9<sup>16</sup>) famous and often-repeated claim that "there is no such thing as society." The similarities between this type of statement—predominant in the United States at least since Ronald Reagan's presidency—and neo-Marxist arguments for "the impossibility of society" are largely superficial. Theorists such as Laclau and Castoriadis take aim at reductive understandings of social causation in which an economic "base" (conceived of in Marxism not as a "market" but as a "mode of production") provides the foundation for any explanation for "superstructural" social and cultural phenomena. In contrast, the neoconservative position mobilizes a

reductive understanding of the market as an isolable, self-regulating subsystem to argue against the extension of state power into social realms where “politics” does not belong. As such, neoconservatism is a theory of society in the classic sense: it argues for a particular way of differentiating various social realms and justifies its differentiation by claiming that each realm operates by identifiable laws. To quote Thatcher again, while society does not exist, “there are individual men and women and there are families and no government can do anything except through people and people look to themselves first” (Keay 1987, 9<sup>16</sup>). In this formulation, the social is reduced to individual and familial interactions that are—not unlike some forms of interactivity taking place in social media—implicitly governed by the market (Barrett and McIntosh 1982<sup>17</sup>).

Like “public,” “community,” and other keywords that point to collective human experience, “society” is often described as being in decline. The dominant version of this declension narrative within American studies and cultural studies uses the keyword “neoliberal” to describe the people and political tendencies that work against the potentiality for solidarity and collectivity inscribed within these concepts. American studies and cultural studies thus take a critical stance toward forms of social science that premise their investigations on rational choice theory, the assumption that society is best understood as an aggregate of

individuals intent on maximizing their interests. A strong argument can be made that the ascendancy of neoconservative politics and neoliberal economic policy in the United States and elsewhere is a response to a decrease in the persuasiveness and affective force of major categories of collectivity, such as nation and class, and a concomitant reduction of the sense of solidarity that such “social imaginaries” could at least potentially produce (C. Taylor 2004<sup>18</sup>). In such a context, the Thatcherite claim that individuals and families are the only bases for human association can come to seem depressingly plausible, even inevitable. This is also the context in which some progressive social movements have narrowed their political ambitions by portraying normative forms of collectivity and association such as marriage and the nuclear family as the best and only means of effecting social change (M. Warner 1999; <sup>19</sup> Duggan 2003<sup>20</sup>).

In American studies and cultural studies, “society” is currently a much less lively and debated keyword than “culture.” This represents a shift from the early history of these fields, both of which emerged as attempts to cross the boundary dividing the social sciences from the humanities and to resist deterministic and totalizing understandings of the social. One of the questions American studies was designed to answer concerned the vexed opposition between the individual and society, and one early sign of the field’s legitimacy was the

extent to which this opposition subtended high-level scholarly projects, more middlebrow arguments, and even high school and college curricula. Foundational and field-defining texts determinedly placed “society” on a par with “culture” as key terms. Williams’s *Keywords* (1976/1983)<sup>2</sup> bore as its subtitle *A Vocabulary of Culture and Society* and had its inception as an appendix to his *Culture and Society, 1790–1950* (1958)<sup>21</sup>. Even texts instrumental in the American studies turn toward issues of subjectivity still identified the social as a causal force, as is evident in the title of Peter Berger and Thomas Luckmann’s *Social Construction of Reality* (1966)<sup>22</sup>. Though these texts privileged culture as worthy of analysis—as a corrective to reductive and mechanistic versions of literary formalism and Marxism and as definitional of their object and method of study—their emphasis on culture was nearly always represented as a means of accessing the more difficult but fundamental subject of society.

The most promising recent tendencies in American studies and cultural studies approach the question of the social in terms that work to avoid the risks of determinism and totalization embedded in the concept. Instead of studying society as an object, they tend to view the social as a process. Stuart Hall has argued that “modern societies [have] a distinctive shape and form, making them not simply ‘societies’ (a loose ensemble of social activities) but social formations

(societies with a definite structure and a well-defined set of social relations)” (Hall and Gieben 1992b, 7<sup>23</sup>). One aspect of that structure is the differentiation into distinct realms—the economy, politics, and culture—that the modernist social sciences have both documented and reified. Yet rather than naturalizing these realms as objects of analysis, the notion of social formation is meant to keep in mind “both the activities of emergence, and their outcomes or results: both process and structure” (*ibid.*<sup>23</sup>). This analytic development has its counterpart in American studies and cultural studies scholarship that treats crucial social categories as historical formations: sexual formations, class formations, and, most influentially, racial formations. Avoiding the tendency to view race “as an essence, as something fixed, concrete, and objective,” as well as the “opposite temptation to imagine race as a mere illusion” or ideology, Michael Omi and Howard Winant (1994, 54–55)<sup>24</sup> define racial formation as “the sociohistorical process by which racial categories are created, inhabited, transformed, and destroyed.” Only a mode of analysis that can keep these elements in play as a dynamic process can address the questions of structure and agency raised by the concept of society.

Beyond the academy, some of the most successful political movements since the end of the Cold War are reviving the concept of society as the basis of a critique of capitalist

globalization and neoliberalism. There is a reason that anticapitalist struggles often coalesce around the term “socialism” and that one transnational organization founded to counter the World Trade Organization (WTO) and other forces of neoliberalism calls itself the World Social Forum. While the latter’s agenda is often misleadingly shorthanded as “antiglobalization,” its very name declares its intent to globalize not capital or trade but society itself. This claim raises important questions about the concept of society: Are there models of a global civil society that avoid subsuming all forms of association and collectivity under the rubrics either of the state (as in Soviet-style communism) or of the market (as in WTO-supported attempts to impose a particular model of “civil society” onto diverse social formations) (Cohen and Arato 1992;<sup>25</sup> Walzer 1995;<sup>26</sup> Keane 2003<sup>27</sup>)? Are there alternative social formations and imaginaries implicit in transnational movements working against sweatshop labor or the militarization of international borders? These are simultaneously political questions about what these alternative notions of society will look like in practice and research questions in which the definition of society is both the site and substance of debate.

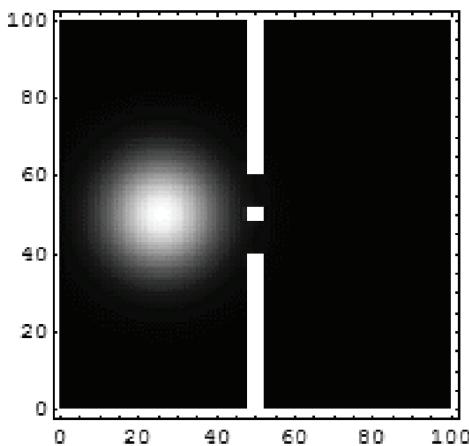
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# THE AGE OF DIFFRACTION

\* ribbonfarm.com \* Thursday 30 May 2019 \* Venkatesh Rao<sup>1</sup> \* 23 minute read \*

There's a state of mind that's been increasingly common for me lately, which I can only describe as a sense of being outdoors in time during inclement temporal weather. I've been searching for the right metaphor to describe this feeling, and I think it is the feeling of being diffracted. Like being a hapless, innocent electron being tortured through the famous double-slit experiment<sup>2</sup>. Here's a cool animation I found on Wikipedia (physics would have been so much more fun if these sorts of animations had been available when I was learning this stuff).



Animation by Jean-Christophe BENOIST at French Wikipedia. [CC BY-SA 3.0]<sup>3</sup>

If your state of mind is normally like that of a particle—you are *here* and *now*, thinking about *this*, doing *that*, with some uncertainty around it all—being diffracted is feeling like a wave. Like you're in multiple states at once,

with those states interfering with each other in ways that creates subjective dyschronia or timelexia.

## Being a Wave

What is it like to be an electron in a double-slit experiment? How is it different from being an electron that's just kinda bumming around in less weird environments, without double-slit torture chambers? Let's call the electron Alice while it is traveling through ordinary space, and Mabel when it is passing through weird Wonderland-like double slits spaces where it's hard to be in denial about your inner wave-like nature.

So what does it feel like to be Mabel Electron, and how is that different from being Alice Electron?

For those who never took college-level physics, the basic point demonstrated by the double-slit experiment is that elementary particles like electrons have both particle-like and wave-like natures. When you torture an electron (which we normally think of as being particle-like) by forcing it through a pair of narrow slits, it creates a diffraction pattern, like a wave.

If you don't know what diffraction is, think of a pair of stones dropped into a pond simultaneously. The intersecting, expanding ripples form a diffraction pattern. If it was paint

instead of water, and you held a stick just above the surface of the rippling liquid so the peaks could lick at the stick, the result would be something like the photographs physicists take of diffraction patterns. Except it would be a 1d picture of a 2d wavefront rather than a 2d picture of a 3d wavefront.

If you insist on a default particle understanding, the electron is simultaneously going through both slits. A more technically accurate way of understanding it is that when an electron is moving through untortured space, the probability distribution of its location is like a fuzzy sphere. It is most likely to be actually “found” by a measurement at the center of that sphere. When it is “passing through” the double-slit set up, the probability distribution looks like a diffraction pattern. The whiter spots in the gif (but not the white of the barrier, more on that later) are places where the electron is more likely to be “found” if you were to put a detector there. The darker interstitial areas in the pattern are where it is less likely to be found.

Human-visible images of such behavior are created by passing a stream of electrons through such a set-up, all of which get diffracted with the same probability pattern. So you see an accumulated picture (much like if you toss a bunch of identical coins, you’ll have an image with about half heads-up and half tails-up which is also the probability of heads or tails for a single coin, an example of

ergodicity). But it is important to note that in the double-slit case, this is NOT because each individual electron is passing through a single, but unpredictable slit (ie coming up either heads or tails). EVERY electron is being diffracted like a wave through both slits. The picture is like a bunch of coins that have come up *both* heads and tails on the same toss.

So to start with, Alice Electron feels like a fuzzy blob, maybe a bit uncertain about her state, but fundamentally together, while Mabel Electron feels like she’s passing through a strainer, fundamentally distributed across a coherent and connected pattern determined by the double-slit torture chamber environment.

## Intrinsic Identity Ambiguity

The distinction between the subjective mental states of Alice Electron and Maude Electron is the distinction between uncertainty and intrinsic ambiguity.

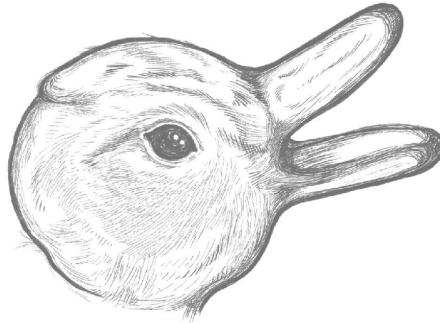
Uncertainty is when you have an imprecise, incomplete, or outdated measurement of a state that is itself determinate. For example, I know I currently weigh  $161 \pm 2$  lbs based on the last time I weighed myself. That’s uncertainty. There is an actual number describing my weight at this instant to any arbitrary degree of precision. I just don’t know it.

Ambiguity begins when you fundamentally don't know *what* you're looking at. For example, let's say I stand on a scale and it shows the number 120. Is it a pound scale that's off by -41 lbs, or a kilogram scale that's off by +48 kilograms?

That doesn't quite capture it though. Here's a better version. If I didn't have a prior belief about my actual weight (perhaps I am from Mars and have no calibration with respect to Earth units), and I had no reason to believe the scale was inaccurate at all, then I'd assign a particular probability to myself being either precisely 120 lbs or precisely 120 kgs.

Even that isn't full-blown intrinsic ambiguity, since I'd be (correctly) assuming that one of the two possibilities is in fact the case (I'm either standing on a kilogram or pound scale), and I'm just uncertain about which one. I lack data about an unknown but determinate environmental state.

Full-blown intrinsic ambiguity is ambiguity in the duck-rabbit illusion sense, where *both* are in fact true at the same time.



Duck-Rabbit Duality

If you look for a rabbit or duck in the above image, with high probability you will see it, and be able to switch between the two. If you look for a popped corn kernel, there's lower probability that you'll see it. This image is a particular diffraction pattern of low/high probability perceptions across the space of roughly round, lumpy object images. This might be quite literally true in terms of the probabilities of various classification by an image classifier.

Now imagine that kind of full-blown intrinsic ambiguity extending out in time as well. Maude Electron exists as a pattern of high probability patches where you are more likely to "find" her if you took a spot measurement. Each of the connected components of Maude Electron is like a horcrux with its own identity, evolving in time, but in a way that's globally connected to how other patches are evolving.

While in Maude state, the Alice-Maude story comprises multiple parallel timelines, one per moving high-probability patch. The Maude chapter of the story has duck, rabbit, and various other subplots.

Or if you prefer (and I'm way out of my depth here) Maude is performing a quantum computation to propagate her identity, while Alice is performing a more classical identity computation (People keep telling me to read David Deutsch on this stuff<sup>4</sup>, and I will at some point. Lisa Neigut<sup>5</sup>, one of those people, is doing a workshop on what I hope are similar themes at Refactor Camp in a couple of weeks, and I'll probably learn precisely how I'm not even wrong then).

The Maude Electron pattern presumably reconstitutes into a single connected Alice Electron blob at some point in spacetime past the double-slit grating (I'm again reaching way beyond my physics pay grade here, but as a fermion, I assume the Alice-Maude electron story has a unique statistical identity to it; it must be harder being a boson).

I'm going to switch back to human stuff before I get myself into deep physics trouble here, but I'll point you to Kenneth Shinozuka's Symmetry and Identity<sup>6</sup> post, and Brian Skinner's old posts<sup>7</sup> if you want more food for thought around the physics reference metaphor I'm developing here.

## Diffracted States

I can't explain myself, I'm afraid, Sir," said Alice, "because I am not myself, you see.

Let me come at the sense of identity diffraction from another direction: What it feels like to an actual human

instead of an anthropomorphic electron.

As it happens, I was in a particularly severely diffracted state this morning so the memory is fresh.

I was unusually distractible, and irritable when I got up, thanks to a night of poor sleep. I had nowhere in particular to get to, and no appointments, but I still had a vague feeling of being somehow delayed and late for something. A sense of being temporally disoriented from the inside out, beyond normal workflow chaos (which I'm comfortable with). Lots of little things going wrong in glitchy ways.

On the way to Starbucks, somehow it seemed like everyone was clumsily getting in my way; that Pike Place, which I walk through almost every day, was somehow more chaotic and crowded than usual. That both sidewalk and vehicular traffic were more gnarled than usual. All this was likely true by the way, and not just in my head. During cruise ship season, Pike Place is full of awkward outsiders, and there's a lot of construction going on too, which explains the gnarly traffic. Still, I don't always *feel* it this strongly and viscerally.

Also I forgot half the lunch I usually pack for extended Starbucks sessions. No banana or cookies for me today.

This is a relatively novel experience for me. Normally, I have my stuff together. Even if it's a mess, it's sloppiness/slack by intention and design. Feeling diffracted is a weird way of feeling off my game.

It has to do with a new approach to life, the universe, and everything that I'm trying on for size, because the old approach wasn't working anymore.

## Multitemporality

Throughout 2017 and 2018, I was in a rather desultory, low-energy mood that was coherent and pleasant enough, but not very productive or energized. I had a strong sense of atemporality; of being stalled in dead time, on a backwater of a historical timeline. Like Alice Electron waiting in front of the double-slit wondering if she should go through. A sense of being outside of historical time on a siding. Aion over Kairos or Chronos<sup>8</sup>.

No great mystery there of course; I was just reacting in my own way to the Great Weirding. What's interesting is how I got myself out of that state.

This year, I've been successfully snapping out of my funk, getting more energized, writing more (and differently), starting new projects, and finishing old ones. But I've been doing it all in a very weird (at least to me) mode that involves a particular mindset and environmental condition.

I call this mindset and environmental condition *multitemporality*. I've been thinking about it for a couple of years now, and even done a talk on it<sup>9</sup>.

It is a mindset of deliberately trying to experience time much like I imagine Maude Electron does, as a set of evolving high-probability patches within a globally connected diffraction pattern. A mindset of being more like a wave rather than a particle.

That's what's been causing my more frequent state of feeling diffracted. It's the cost of living like a wave. This isn't all entirely inside my head of course. Multitemporality requires properly designed prosthetics in your environment to achieve. It's not that easy to interfere with yourself, and when you do succeed, it mainly feels annoying rather than productive. Still, you get things done, and you move along instead of being stalled in atemporality.

You might say I've set up a complicated double-slit experiment in the operating environment of my life. On this blog for example, there are the blogchains I've been writing. Each is a little subjective clock for me. They're all connected, yet distinct, creating a personal narrative multiverse in which I'm doing a big chunk of my thinking.

Week Number Week of (Monday)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Songs Title	1/21	1/28	2/4	2/11	2/18	2/25	3/4	3/11	3/18	3/25	4/1	4/8	4/15	4/22	4/29	5/5	5/12	5/19	5/26	
1 Wandering Diary	1	2	3	4	5	6	7	x	x											
2 Editing Sutra	1	2	3	4	5	6	x	x	x											
3 Working Spell										4	5	6	7	8	9	10	11	12	13	
4 Working Raga (with Ian)										6	7	8	9	10	11	12	13	14	15	
5 Domestic Cosy										3	x	4	5	6	7	8	9	10	11	

Twitter, where I've been way more active in the last couple of years, is also part of my multitemporality scaffolding. It is a much higher-resolution, improvised, socially constructed diffraction grating.

The private and consulting parts of my life are going the same way. It's all a bunch of slits I'm passing through simultaneously.

It's not compartmentalization, and it's not multiple identities. It's experiencing time like a wave rather than a particle.

## Diffracted Identity

While I'm passing through my self-designed multitemporal torture chamber, as Alice said to the Caterpillar, "I can't explain myself, because I'm not myself, you see."

Well, that's not quite right. I know who I am myself while I'm in a classical Alice-like state. I don't know who I am while I am in a non-classical Maude-like state, but even in that state, so long as I'm mostly concentrated in a single "time tunnel" (as when writing a new post in a blockchain) I do know who I am. It's when I have to switch between tunnels that things get confusing.

I made a half-serious joke on Twitter yesterday: Most of the time, time is on autopilot and kinda ticks along by itself. But sometimes, the autopilot craps out and you have to take over manual control to drive it along.

Atemporality is when the autopilot of subjective time experience craps out because it has run into an impassable narrative barrier that you cannot go around.

Multitemporality is when you take over manual control and drive it through the barrier.

There's two ways to do that, classical and quantum time tunnels.

(And before a mob of angry physicists @s me for Deepak Chopraing all over this subtle topic, let me hasten to assure you I'm talking about subjective, Bergsonian time experience. Kairos, not chronos; there are no physics claims being made here about time. At least not on purpose.)

## Classical Time Tunnels

Before I settled on this diffraction and "interfering with yourself" metaphor, I was thinking of what I was doing in terms of tunnels in time, each with its own internal subjective *kairos* clock. Classical time tunnels are ones you can just walk through. No diffraction needed so long as you know how to navigate.

This is pleasantly poetic way of putting it, but the underlying metaphor is neither original to me, nor particularly mysterious. We all use the classical time tunnels metaphor implicitly when we talk about multitasking or parallel processing, or when we juggle

multiple projects. My blockchain approach to writing myself out of the weirding is an example.

The way we talk about parallelism maps to tunnels in space in a classical sense. If you're walking along a branching network of tunnels underground, you're always in a single tunnel at any given time. To get between tunnels, you either pop up overground and cross over via an open-surface path to the entrance of another tunnel, or you use special cross-tunnels.

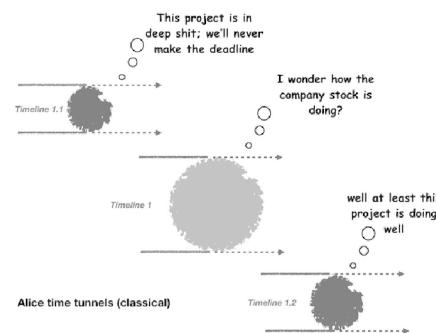
That's two varieties of classical context-switching, open and closed.

For example, if you work for a large company, chances are you are matrixed into multiple projects, and when you attend review meetings, you get to look at slides indicating progress against some sort of internal project clock. Perhaps it is a burn down chart of features built. Or a time-to-go towards a deadline. Or times past a starting time. Or a red/yellow/green delay status indicator.

These localized subjective time cues are very familiar and important elements of industrial life, but they represent a classical understanding of time as mapped to space. When you walk from one meeting to another relating to a different project, you briefly transition through an enveloping shared context containing both of them. That's a closed context-switch cross tunnel. Maybe you check

your email. Maybe you think about broader company level stuff. Maybe your attention leaks out of the corporate context and you think about plans for the upcoming weekend.

In other words, your context switching *itself* has a coherent context. Imagine Alice Electron going from one meeting to another.



The thing about classical subjective time tunnels is that *you have continuity in your stream of consciousness*. Context switches, whether open or closed, might feel more or less disorienting, but fundamentally feel like they're part of the same stream of consciousness. You don't feel like you're living in multiple parallel timelines at once. You don't feel like you're interfering with yourself.

## Interfering with Yourself

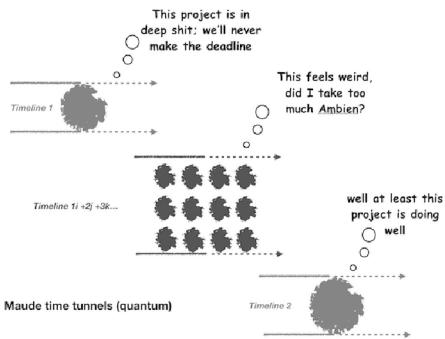
In quantum mechanics, there is a notion of quantum tunneling that's like the weirder Big Brother of the double slit experiment. In the double slit experiment, at least the idea of "slits" (tunnels in a sheet of material)

is a classical-geometry way of understanding a tortuous environment designed to bring out the electron's inner wave-nature.

Turns out though, that if you get to small enough scales, the barriers themselves start behaving in quantum ways, and even without slits, particles can sort of phase through walls like superheroes. This is the quantum tunneling effect<sup>10</sup> that you may have heard of. It is one of the constraints on modern processor design.

To map this metaphor to what Maude might feel like transitioning between meetings, imagine that there are no cross-tunnels between contexts, and no way to pop up back to the surface and back down via a surface path, because fundamentally there *is* no surface, and no open embedding space in which the tunnel system exists. The temporal outdoors has collapsed. The limited system of tunnels is all there is.

Context switching in such a condition will feel like quantum tunneling through nominally solid barriers. And while doing so, you'll feel more like a wave than like a particle, a superposition of states rather than a sequence. An evolving mesh of consciousness rather than a stream of consciousness.



In a quantum tunneling environment, the set of individual context tunnels are the only places “you” as a coherent Alice-like whole can be. There’s nowhere else to be. So if you’re not coherently inside one of them, you’re smeared via probabilistic superposition across *all* of them.

You’re in a diffracted Maude state. You’re interfering with yourself. You’re in a post-Woolfian, post-stream-of-consciousness story. A story that has no temporal outdoors to it.

## Outdoors in Time

In our classical subjective time tunnel metaphor, there is an obvious mapping for being outdoors in space. You have to map *space* to *narrative*.

The system of tunnels is a classical bounded geometry contained within a system of barriers embedded in a larger non-weird space. So long as there is always a larger embedding space, the idea of going “outdoors in time” is unproblematic. You’re stepping out from a narrower story into a broader one, from more foreground to more background.

For example, walking between project meetings at work is probably a case of context-switching via closed cross-tunnels within the broader corporate timeline. But walking home from work, when you are mentally neither at work, nor at home, is a case of being outdoors in time, experiencing the timeline of the broadest story of all: that of the world itself, the grand narrative.

You might see a hundred little things in the environment as you walk home, and make sense of them in a hundred seemingly isolated ways. Perhaps you see homeless people and wonder about their lives. Perhaps you see a protest in progress and think about politics for a bit. Perhaps you see an “opening soon” sign for a new pizza place and think, “I might want to try that.” Perhaps you see a bus headed to another part of town and think, “hmm, I should go there next weekend.” Perhaps you notice the weird weather and wonder about climate change.

These sensations and thoughts that you experience while outdoors in time—navigating an open-narrative-space context switch—constitute a temporal or narrative “weather” of sorts. You’re cutting across many different subjective process times. The more individual tendrils of thought and sensation harmonize with each other and the various closed time tunnels you spend your time in, the more you’ll feel normal. The more they

make no sense in relation to each other or your closed time tunnels, the more you’ll feel weird.

If it feels weird enough, you might wonder if there’s a there there at all.

## Appearing in Public

That sense of overall harmony we experience while navigating open context switches is really what a societal “grand narrative” is. It has no author, but that doesn’t mean it doesn’t have a texture and direction. You have a broad, overall sense of the background currents of Big Historical Time that you’re caught up in, and being swept along by. Sometimes you can influence the flow of events in some small local way, other times you’re being swept along passively. Sometimes you pop into the foreground, other times you fade into the background.

The sense of being “outdoors” during an open context switch is a sense of an overall harmony among thousands of interpenetrating subjective time tunnels. In some, you are an actor. In others, you are a spectator. In some you’re an insider. In others, you are an outsider. The overall experience is that of appearing in public and participating in history<sup>11</sup>.

This illusion of being “outdoors in time” when you appear in public is strong and coherent under situations that map to classical conditions, and

weak and fragile under ones that map to quantum-torture-chamber conditions.

The former condition is what we think of as *normalcy*, when the outdoor time environment isn't a sensory assault of a hundred glitchy sensations.

The latter condition is what I've been calling the Great Weirding. Another good term for it is narrative collapse. The present interregnum between aeons of human history which began with the death of Harambe the gorilla.

## Narrative Collapse

Narrative collapse is when the felt sense of subjective time during open context-switches does not have a sense of emergent harmony, but is experienced, instead, as atemporality. Under a condition of narrative collapse, classical open context-switching feels weird and hard. But if you stick to single contexts and closed context switches it feels like you're under siege, unable to get out in some sense.

*Narrative collapse is when there is nothing it is like to appear in public.*

Narrative collapse is a good term, especially when applied to grand narratives. The grand narrative is an emergent harmony that prevails at the largest outdoors in time scales that you experience during classical, open context-switches between the various narrower time tunnels of your life.

While in a state of narrative collapse, you still *think* in terms of being "outdoors" in subjective time and appearing in public (though you may not call it that), but what you're actually doing is phasing through walls like a superhero rather than context switching in a classical way. You are quantum tunneling between parts of your life, smearing yourself like Maude Electron along the way, never touching a state that feels like "appearing in public". That's what feels weird about the weirding. Because the grand narrative has collapsed, there is nothing it is like to be outdoors in time. What you mistake for a weird outdoors-state is the sensation of being in a diffracted state.

But you don't think of it that way. You just think of it as the "outdoors" in time being/feeling weird instead of normal, and feeling an urge to "retreat" to the most robust private, classical time tunnels you can, minimizing time spent in diffracted states, phasing from one context to another.

It's like avoiding going out in bad weather. This is the retreat mode I've been calling waldenponding. The problem is, just as sometimes you do have to leave home to get somewhere else you need to be in space, sometimes you do have to switch context across time tunnels to be somewhere else you need to be in subjective time.

There are two alternatives to staying home in bad weather.

*First*, just as you can put on appropriate rain gear and/or warm clothing and go out comfortably in bad weather, you can go out in bad temporal weather. Just set your information filters, mutes, and blocks to keep the worst, most disorienting weirdness out. This works up to a point but eventually fails if the weather gets bad enough. That's filter failure.

*Second*, you could just use a system of underground tunnels to get around, like those in many major cities that have a lot of unpleasant weather to deal with. They work in much worse weather, but the downside is they are much more disorienting environments.

Also they might not be classical time tunnels. They might be quantum time tunnels. To use them to get through the weirdness, you might have to learn to be like a wave. You might have to learn to interfere with yourself.

Mind like water. Mind like Maude.

## Through the Weirdness

The question naturally arises, why do this? Why subject yourself to what I've been describing as a kind of torture of subjective identity?

One reason is it's the only way through the weirdness. Understood as a solid, classical-physics barrier, the Great Weirding is a condition of narrative collapse that is too wide for the story of history—and your story within it—to go around.

And though there are tunnels under the barrier, they constitute a treacherous maze where you could potentially get hopelessly lost in if you attempted to navigate them in a classical way. And they're such a tight squeeze relative to the size of your identity—just like the slits in the double-slit experiment are at the scale of the wavelength of electrons—that might not even be an option. So you kinda have to diffract through; ooze through like minced time-meat, and do so using more than one tunnel at once.

Speaking of mazes, my buddy Dan Schmidt makes fascinating maze drawings<sup>12</sup> and is just putting together a book of mazes that really levels up this children's pastime to adult levels of intrigue. Here's one of the mazes from the book (we're hoping to distribute preprint copies at Refactor Camp).



Classical maze navigation has been a long-time interest of mine, from back when I was working on robot navigation algorithms (here is a 2007 post<sup>13</sup> of mine applying the concepts metaphorically to the Harry Potter narrative world). But Dan's mazes get at fascinating levels of emergent complexity in the topic that I haven't seen explored before, either conceptually or technically.

But think about how you might get through a maze.

How do you "phase" through a barrier that is too wide to go around, and whose tunnels are treacherously difficult to navigate in a classical way, with no exits to pop out of, and no map?

To phase through a potentially impossible maze, you have to smear yourself out like Maude to use all the tunnels, becoming wave-like and feeling weird along the way. That's multitemporality. It will feel really weird, but at least you'll be moving

along. Time hasn't stalled for you, even if it is moving along in an unfamiliar way.

The maze might even be classically impossible, like one of the examples in Dan's book, without being obviously so, especially from the inside. In that case, multitemporality might be the only way through.

This is the deeper danger of waldeponding. In pursuit of the classical normalcy of a limited environment—a classical time tunnel—where you can maintain the coherent identity you are attached to, you might get trapped inside the heart of an impossible maze.

Alice may not be able to work herself through the barrier without briefly turning into Maude. She might be trapped within the limits of a *diffraction-limited narrative*.

## **Diffraction-Limited Narratives**

There is a concept in optics called diffraction-limited optics, where lenses and mirrors have been made as perfect as possible, and the image quality they produce is only limited by the wavelength of light, but you still can't see what you need to see.

To get past the diffraction limits of a near-perfect optical instrument, further improvements don't help. You either have to make a larger

instrument or use a smaller wavelength for imaging. That's how you end up at electron microscopy.

There's a third option: learn to work with the wave-like properties directly. This is how you get (among other things) interferometric imaging with what are known as "synthetic aperture" telescopes, where many small telescopes are combined in an array to act like a larger one. Long ago, in another lifetime, I worked on aspects of this stuff for my PhD.

The Great Weirding and associated narrative collapse is, in a sense, the narratives of the industrial age reaching some sort of diffraction limit. Even the best historians of our age will not be able to handle the narrative collapse we're living through with traditional history-writing techniques. So what are our options?

1. We could go grander. Bigger telescopes! This is what a lot of big history theorizing of the *Sapiens* variety appears to attempt. The results are kinda janky and feel like unsatisfying just-so myth-making. It is just hard to make and hold up really big mirrors to the human condition.
2. We could work with shorter and shorter wavelengths. I think this is roughly what intersectional identity politics is trying, and failing, to do.
3. Or finally, we could learn to work with our own wave-like nature, embracing diffracted identities and multitemporality.

I suspect, as in astronomy, the third option is the only one that is actually workable past a point of complexity. I suspect we're all going to have to get weird and wave-like to navigate the near future and learn to tell our own stories again.

I like to think of it in terms of that old stoic line: *the only way out is through*. I've preferred the slight variant *the only way through is through*, because with time, there is no "out", even though sometimes it is helpful to pretend like there is.

The quantum-tunneling update to that is: the only way through is to *diffract* through.

That's why we are in the Age of Diffraction. You have to interfere with yourself to get anywhere at all.

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# BODY PLEASURE

\* ribbonfarm.com \* Thursday 3 August 2017 \* Sarah Perry<sup>1</sup> \* 15 minute read \*

Suffering is very serious. Death is very important. Let me instead talk about something else that is becoming both serious and important, as the world gets richer and more awesome: the problem of pleasure.

Excessive leisure time is a problem that has only become widespread in the past century. As non-human intelligences get more sophisticated, it may be the case that human work remains extremely important; however, it may also be that humans are faced with increasing leisure. If that is the case, the critical problem facing humanity will be how to enjoy ourselves. If that seems silly, consider your favorite dystopian images of the future: only humans who understand how to enjoy themselves can demand living conditions in which they are able to do so.

Let's get some silly ideas about pleasure out of the way so we can get on to the interesting stuff. First, there is the Puritan idea that seeking pleasure (especially body pleasure) is immoral because it is presumed to substitute for doing good for others. In order to take this seriously, we must construct human effort as (1) an invariable lump (2) that is maximally engaged in doing good. Consider, rather, that energy and effort may *increase* with increasing pleasure, and that a person who experiences a lot of

pleasure may be *more* inclined to deny his baser instincts (including laziness) for the good of others.

Second, there is the idea that pleasure seeking is necessarily selfish. Two facts undermine this assumption: one, the extreme connectedness of humans, such that they can readily share information about pleasure (especially given pleasure "quora," meaning wide, if not perfect, agreement among humans about what is pleasurable and how pleasurable it is); two, the special information each person has about himself, such that he is most qualified to make adjustments about his own well-being. A *norm* in which each person is entitled to devote a certain percentage of his effort toward personal bodily well-being and pleasure is a highly efficient norm for maximizing average pleasure. Traditions like sabbaths, whether or not that is their intent, assign a proportional "floor" of time that must be devoted to loafing, if not precisely to pleasure. Any person who accepts a life of low bodily pleasure and poor affect, even if he does so for beneficent reasons, is failing to contribute to group *learning* about pleasure, and failing to contribute to a *cartel* in which humans demand a floor level of bodily well-being—in a sense, scabbing against humanity. And it seems intuitive that happier

people are less misanthropic than unhappy people who take no pleasure in life.

Third, there is the idea that bodily pleasure seeking is not as important or sophisticated or valuable as pleasure-seeking of an intellectual, spiritual, higher status, or more abstract nature. Is body pleasure low and shameful? Is body pleasure a *substitute* for higher pleasures?

Certainly, the idea that feeling good is a *problem* is reflected in the fact that “euphoria” is considered a negative side effect of pharmaceutical drugs. Pleasurable sensations are often packaged with health and spirituality messages (massage, yoga); this provides moral cover for pleasure, but also suggests that physical and “higher” pleasures often go together. Pursuing body pleasure may induce *greater* pursuit of more social or abstract pleasures. The “groove” of music<sup>2</sup> is a bodily pleasure connected to the more social, abstract pleasure of group rhythmic entrainment. Music itself spans the distinction from bodily and personal, to abstract and/or spiritual (mathematics, theology).

Fourth, there are unnecessary assumptions typically made about hedonism, such as that agents would maximize short-term selfish pleasure at the expense of total expected pleasure, such as by breaking promises (and thereby becoming a less desirable cooperation partner). But only a very stupid pleasure maximizer would get himself addicted

to heroin, trading short-term pleasure for long-term suffering. What are the best strategies for people who want to maximize pleasure in the long term? What is the best that human life can offer, at a very concrete and foundational level? These questions are little considered, in part because of Puritanical cultural norms, and in part because nobody thinks they are important.

## **Following Pleasure**

If your goal is to experience more pleasure in the long term, it's hard to know what to do. Markets are, at best, lurching blindly in all directions—offering “luxury” goods that are poorly connected to pleasure, and the same old sex toys, and an array of psychoactive substances limited by contemporary prohibition fashion. And there's no reason to expect that effective pleasure exploits are easy to find. It may be that people have hedonic “set points” and can't, in the long term, feel much better than their natural level through chemical or behavioral changes. Many body pleasures are themselves connected to maintaining homeostasis. For instance, exercise is experienced as pleasurable for only as long as the body can maintain levels of oxygen and lactate. The body adapts to changes imposed on it, which is why heroin addicts require more and more heroin in order to feel not quite as good.

*Nociception* is the sense of pain; there is, to my knowledge, no equivalent for pleasure. Pleasure is more complicated than pain. It has been popular for a long time to confidently oversimplify pleasure into its supposed chemical substrates: endogenous opioids, endorphins, serotonin, oxytocin, endocannabinoids. However, producing reliable pleasure (as may be reluctantly desired in the case of anhedonia, for example) is not as simple as supplementing, or preventing the reuptake of, these chemicals.

Unlike pain, pleasure typically requires an *appetite* for a particular behavior (eating, drinking, sex, exercise). There is always the potential for pain; the potential for pleasure is more limited. Pleasure may occur during the interval over which this appetite is satisfied, and satiety itself may be pleasurable for a while. Appetites and their correspondent pleasures vary in how intense they are, and in how long they take to reset. Importantly, they also vary in *how long the pleasure can last*, both at a stretch, and in terms of hours per human week. Pleasurable states that are highly sustainable, potentially taking up a lot of hours that would otherwise be spent in a neutral or painful state, are especially valuable. Intense pleasures that evaporate quickly and take a long time to reset may not be so valuable. And the best pleasures would be ones that increase appetites for complementary pleasures.

## Domains of Bodily Pleasure

By bodily pleasure, I mean to highlight pleasures that subjectively feel as if they are embodied—the pleasures of eating, sleeping, exercise, and sex, for example. This is somewhat of an arbitrary boundary; many of what might be called intellectual pleasures are highly interconnected with bodily pleasure. The beauty of the night sky, the smell after rain in the desert, the pleasurable tired-soreness after exercise, massage—these are bodily pleasures, though they may be associated with intellectual pleasures: astronomical awareness, environmentalism, health, high status.

Panteleimon Ekkekakis is one of the few scholars to study the relationship between exercise and pleasure (see the next section). When scientists attempt to study pleasure, it can be difficult to distinguish extreme scientific distance from personal ignorance. Am I, perhaps, a major outlier, or has the author of this paragraph<sup>3</sup> never experienced exercise?

[E]specially among trained and physically fit individuals, a commonly used expression is that vigorous exercise “hurts so good.” Although this

may be seen as supporting the notion of independence, an alternative interpretation is that these apparently conflicting responses originate from different levels of the affective hierarchy. The "hurt" may reflect the inherent unpleasantness of the bodily sensations that accompany strenuous physical effort i.e., basic affect), whereas the "good" feeling may reflect a sense of pride i.e., an emotion) sparked by the thought that, by exercising, one is doing something good for his or her health, fitness, or physical appearance.

Cooling down from a ten mile run last week, I noticed how pleasurable it was to climb stairs, and briefly wondered about the tallest buildings in town, and whether it would be possible to access their stairs. It didn't feel good in the sense that I felt "proud" of exercising. The pleasure was purely physical; the soreness in my muscles felt as if it were being massaged out with each step. I am left to wonder if there are major categories of pleasurable experience that many people don't know about. I will briefly outline what I see as the major sources of bodily pleasure. Many of these overlap; just as notes overlap synergistically in musical chords, pleasures can support each other and perhaps reveal better cognitive states.

## 1. Sex

I'm going to go out on a limb and assume that, at this point, most people are adequately informed that sex and masturbation are pleasurable activities. It's worth noting that, while sex and masturbation *activities* can't take up a very high percentage of most people's time, sexual *fantasy* and sexual *display* can potentially take up a great deal of time, and add *frisson* to other activities. Sexual display is part of why dance, costuming, and adornment are perceived as pleasurable, and sexual fantasy can relieve boredom during a period of cognitive surplus, such as waiting in traffic. Even weirder, sexual pleasure can result from patently non-sexual activities<sup>4</sup> even without sexual fantasy.

## 2. Eating

Like sex, eating can only be pleasurable when there is an appetite. Smell and taste can be used to stimulate desire; saltiness, fat, sweetness, umami, or even drug content (as with caffeine) reinforce the act of eating as pleasurable. Desire is gradually replaced with satiety. This limits the amount of pleasure available from eating. Interventions that increase appetite—for instance, exercise—increase the amount of food that can be comfortably eaten. Appetite also increases the pleasure that can be derived from a given food; freeze-dried pasta, prepared on a peak after a long climb with a heavy pack, is more pleasurable than the most expensive meal at a restaurant.

### **3. Co-Consciousness**

Co-consciousness is the social experience of being conscious along with others. Part of what you're paying for when you get coffee in a coffee house, in addition to caffeine and work space, is the feeling of being in the company of others. Co-consciousness seems to enhance many pleasures—humor, dancing, and all the pleasures mentioned above are typically intensified by co-consciousness.

However, an alternative pleasure is that of *privacy*. Well-designed human spaces allow for a balance between togetherness and solitude, recognizing that different people are most comfortable at different levels of exposure.

### **4. Muscle Pleasure**

Pleasure felt in the muscles unifies pleasure from moderate exercise (see also next section), post-exercise movement, stretching (as with yoga), massage, exfoliation, temperature extremes, and rest. Muscle pleasure from stretching, massage, and saunas is most intense and available after moderate exercise. Washing with a salt scrub feels pretty good, but if your muscles are sore from exercise, it feels much more intensely and acutely pleasurable. Walking around is okay, but if you've just exhausted yourself, it feels luxurious. Same goes for sitting on one's ass, or lying in

corpse pose. As hinted at in the sex section, there may be a synergy with sexual pleasure as well.

Muscle pleasure is one of the strangest pleasures—as hinted at in the excerpt above—because it includes a sensation that's easily recognizable as a kind of pain. It's important to note that not *all* pain feels good in this state: stretching too far, or injuring soft tissue, still hurts; being thirsty is still unpleasant. But the “pain” and “soreness” of exhausted muscles, when those sore muscles are stimulated by massage, stretching, low-intensity activity, or exfoliating substances, is experienced as raw bodily pleasure.

Massage unites co-consciousness and muscle pleasure. In order to be perceived as pleasurable, stimulation from another, as in Swedish or Thai massage, must be slow, predictable, and rhythmic; or, more rarely, fast, predictable, and rhythmic (as in percussive massage techniques). Massage as a cultural ritual uses techniques to make touch more pleasurable and less intrusively intimate: covering the body, eschewing eye contact, limiting speaking, ensuring that massage strokes are away from rather than toward the breasts and sex organs, etc. Non-human muscle stimulators (e.g., vibrating massage chairs) do not seem to provide as much pleasure as humans, but that may change in the future.

## **5. Temperature**

Temperature extremes are a common element of leisure and pleasure: hot tubs, saunas, steam rooms, cold plunges, rolling around in the snow, polar bear swims. These technologies either make maintaining homeostasis much easier (as with hot tubs) or challenge the temperature homeostatic process (as with cold plunges) such that the recovery process is enjoyable. I'm not sure why saunas and steam rooms are pleasurable. Sunshine, shade, and water, to the extent that they are pleasurable, are leisure components that help or challenge homeostatic processes.

## **6. Proprioceptive Pleasure**

Proprioception is the feeling of where one's body is at. By "proprioceptive pleasure," I mean the exhilarating feeling of gliding while downhill skiing or ice skating; the pleasure of riding a motorcycle; the pleasure of Disneyland rides, of soaring or weightless falling; the pleasure of hang gliding; the pleasure of swimming underwater.

Proprioceptive pleasure is why it's fun to dance (other than sexual signaling, as mentioned above). Virtuosity, dexterity, and self-efficacy may intensify the experience, as with riding a motorcycle or skiing, but are not necessary, as with rides.

## **7. Drugs**

Direct chemical adjustment is not so much a *domain* of pleasure as a shortcut to pleasure. When drugs are administered regularly, the body typically adapts; physical habituation is an important criterion in the "addiction" model of human behavior. Drugs that are administered too rarely for habituation to take place (e.g., psychedelics, ketamine trials for depression) might be the best candidates for long-term better feeling. Using addictive drugs (such as alcohol, tobacco, and opiates) rarely, or only as needed to relieve pain, is probably a better strategy for maximizing lifetime pleasure. Pain is extremely subjective, however; it's impossible to know whether another person is genuinely in pain. We are each probably the best custodians of our own bodies vis-a-vis palliative drugs.

The one drug I think this doesn't apply to is cannabis, for reasons outlined in the next section.

## **8. Smell, Taste, Visual Beauty**

I think that smell and taste mostly serve two functions: to motivate disgust, and to motivate desire. In and of themselves, they can rarely cause significant pleasure. Visual beauty is likely similar: motivating appetites, providing intellectual pleasure, but not providing much in the way of bodily pleasure on its own. *Mess*, I think, is visually uncomfortable; beauty, however, is probably only the

absence of this kind of discomfort. Visual beauty is also easily worn out; we quickly get bored of looking at a beautiful view.

## Exercise Pleasure

The pleasure domain that I see as undergirding all the other experiences of pleasure is exercise pleasure. Yet most people hate exercising, and associate it with pain.

This is because our exercise morality is ridiculous and self-defeating. Exercise morality suggests, with little evidence, that exercise promotes physical and mental health. Based on this, exercise is imposed on people beyond what is pleasurable for them – “no pain, no gain.”

Panteleimon Ekkekakis (mentioned above) is a hero simply for demonstrating that people enjoy exercise up to a certain level of intensity<sup>5</sup>, which varies for each person. Most people who do low-intensity exercise feel better during the mild exertion. At the point when the body can no longer maintain levels of oxygen and (separately) lactate in the muscles, the exercise becomes so intense that basic affect (feeling good or feeling bad, the lowest-level evaluation of anything) plummets. Everybody feels terrible when they exercise too hard. Once people rest for a few minutes, they start feeling good again. However, this may not be enough such that people evaluate the entire experience as pleasurable.

Unfortunately, most on-ramps to exercise are at an intensity too high for previously-sedentary people to find them pleasurable. If people go to a fitness class, or focus on running a particular distance at a particular speed, they’ll likely miss the pleasure zone entirely. Refocusing on exercising only for one’s own individual pleasure, as slowly as one prefers, and only at intensities that are pleasurable, is more likely to motivate repeat and habitual exercising. At that point, the enjoyment of exercise pleasure can build on itself, motivating longer and longer intervals of experiencing the pleasure. I summarize Ekkekakis et al.’s result as: “learn to exercise out of extreme selfish laziness.”

Exercise pleasure is particularly valuable because, unlike other pleasures, it can be prolonged to take up a significant portion of waking life – up to hours per day, as would have presumably been the case in our environments of evolutionary adaptedness. It is also complementary with other potentially healthy pleasures, such as sunshine and eating food. If you believe that exercise is “moral” in some sense—good for mental health or weight loss, perhaps—you may be better off forgetting what you think you know, and pursuing exercise only for the way it makes your body feel. It’s an interesting hedonistic paradox.

Probably the only important thing that I have ever discovered is that using marijuana before

cardiovascular exercise (running) massively increases the pleasure of exercise, and decreases the time and distance to “runner’s high” to as little as ten minutes and a mile or so (at a slow pace), respectively. At this point, it’s appropriate to be suspicious of claims about endocannabinoids “causing” runner’s high or jump-starting exercise pleasure, but after my own n=1 research over the past eight years, I think it’s worth letting other researchers attempt to replicate my results—especially as more states legalize marijuana for recreational use.

For the same reason that there’s no strong evidence that exercise causes people to live longer or experience less depression, there’s no strong evidence that frequent marijuana use causes people to become stupider. Even if it did, to the extent that marijuana makes exercise pleasure more available—thereby making pleasure from muscle soreness, food appetite, temperature extremes, and sex more available—frequent use may be worth the trade-off for some users.

## Comfort Traps

Just as there are potentially pleasure exploits—ratchets, such as low-intensity exercise, that increase the amount and duration of pleasure—there are potentially traps that decrease pleasure even as people seek to increase it. For instance, consider softness, cushioning, and support. Softness (as with clothing, shoe soles, mattresses, pillows) is comfortable at

first; it feels actively nice for a few minutes. However, in the long term, the sensation of softness degrades into no perception, and even potentially increases the risk of harm by masking sensation. The idea of “support” can be seen in the foundation garments of the 1950s, girdles designed to hold in stomachs and pudgy bits. Unfortunately, this style of garment decreases the need for the muscles of the abdomen to work to support the body (“core strength”). Similarly, shoes that “support” the arches decrease the need for the muscles of the foot to adapt to support the foot. I’m suspicious as to whether soft mattresses and rigid-yet-cushioned running shoes maximize comfort.

On the other hand, compressive running clothes (tight tights and sports bras) do seem to improve the experience. They turn the body into a simpler system, such that the jiggly bits fit more smoothly in repetitive proprioception.

Part of comfort is simply freedom from pain. The pursuit of comfort alone may reduce pain, but fail to maximize pleasure; from the outside, it’s extremely presumptuous to tell a person he or she would be better off with an objectively different body management strategy. I think that the best we can do is to take pleasure seriously, to share strategies for body pleasure management, and ideally, to increase the ease with which everyone can pursue a pleasurable and pain-free life—not just a meaningful life.

From: [https://www.ribbonfarm.com  
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# COLOPHON

Walden Pond is laid out using Paged.js, rendered with Chrome, using Noto Serif JP for the body text, and Raleway Dots, Raleway and Cinzel Decorative for headings.

It is made in Marrickville, New South Wales, Australia. Then printed by Lulu, somewhere near you.

Cover art by Magnus Manske (✉ @MagnusManske)



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