ACX Book Reviews 2024

Vol. 2: E-I

Egypt’s Golden Couple: When Akhenaten and Nefertiti Were Gods on Earth by John and Colleen Darnell

A puzzle: Why does the Sun not play a larger role in religion? It is by far the most powerful object we witness in daily life; it gives life to everything, and it marks the passage of time. Its workings weren’t understood until modern science, making it clearly magical. Yet it doesn’t feature prominently in any of the great monotheisms or other modern religions. It usually appears as a god in polytheism, but rarely as a central or especially important one. Why not?

A possible answer: It’s been tried before. And it didn’t go well.

□.

The first reason to read about Pharaoh Akhenaten (born at some point before 1363 BC, died in either 1336 or 1334 BC) is his maybe-monotheistic sun cult, a unique occurrence in history. After a few years of more-or-less normal reign under the name Amunhotep IV, he elevated the sun disk, in Egyptian called the *Aten*, as the main or even sole god of the pantheon. He then renamed himself Akhenaten (“Effective for the Aten”), and he moved the capital from Waset, a.k.a. Thebes or Luxor, to a new planned city with an annoyingly similar name to his own, Akhet-Aten (“Horizon of the Aten”). This turned out to be rather disruptive to the ancient Egyptian people, and after Akhenaten’s death, 17 years into his reign, the traditional religion was restored. Most of his legacy was erased, often literally by chiseling away his face from reliefs and statues. Later pharaohs went so far as to remove him and his immediate successors from king lists, as if they hadn’t existed. If they had to refer to him, they obliquely called him “the enemy of Akhet-Aten”.

It’s a dramatic story, perhaps the most interesting one out of the millennia of ancient Egyptian history. Akhenaten has been called “the world’s first individual” because of his supposed freethinking, outside of traditional religion; less theatrically, he has been seen as “the first monotheist”, foreshadowing Moses and Jesus. Sigmund Freud used him as proof of his Oedipal complex (*obviously* his radical actions stemmed from his complicated relationship with his father, Amunhotep III). Others called him mad, revolutionary, incestuous, totalitarian, messianic, physically weak, effeminate, morally corrupt, etc.

The second reason to read about him is that he was married to this woman:

This is Nefertiti, as represented in a bust carved by the sculptor Thutmose (quite amazing that we know the artist's name!) in 1345 BC. This piece is probably the second-most famous artifact from ancient Egypt. It ended up in Germany due to either intentional deception from the German archeologists or an administrative mistake by the French-led Egyptian Antiquities Service, and is now a main attraction of the Neues Museum in Berlin, where I once photographed it despite not being allowed to:

(The bust is that tiny golden thing in the dark room beyond the door at the end of the hallway. I had to take a picture from this far to evade the security guards' watchful eyes.)

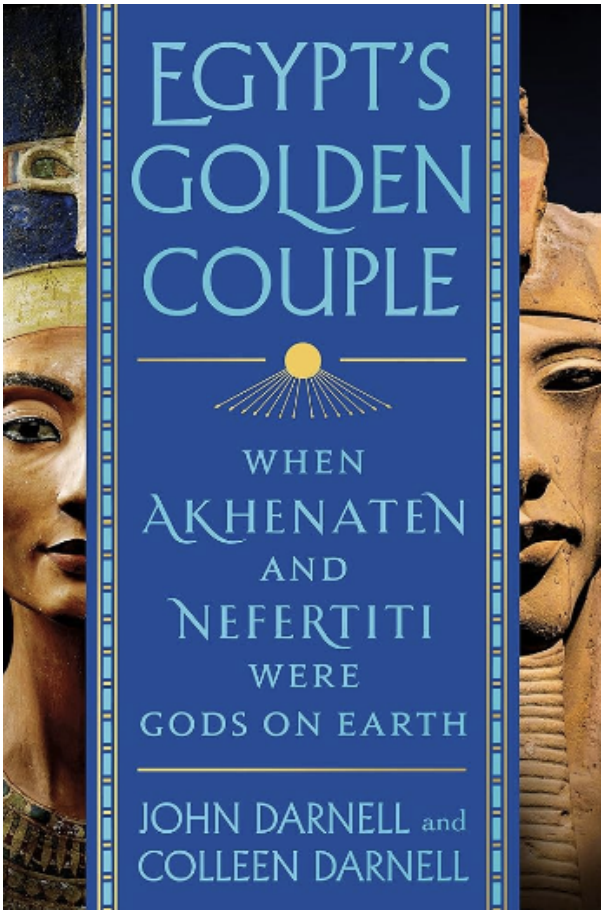
Nefertiti, besides being a beautiful woman whose name literally means "the beautiful one has come", was Akhenaten's Great Royal Wife and maybe his co-ruler, as well as a candidate for being the female pharaoh of uncertain identity who reigned for a short time after his death (and the short reign of an equally mysterious male pharaoh). It's clear from the evidence that she and Akhenaten formed a power couple, one that happened to rule in the middle of Egypt's peak of power and prestige and messed up everything.

Why is her bust only the second-most famous Egyptian artifact? Because, of course, it is outshone by this *other* artifact, the death mask of Pharaoh Tutankhamun:

(This one has always stayed in Egypt, in case you were wondering. Fun fact, it may actually have been intended for Nefertiti or whoever that mysterious female pharaoh was, maybe Nefertiti's daughter Meritaten.)

What you may not know about Tutankhamun is that his birth name was actually Tutankhaten ("Living Image of Aten"). He was probably the son of Akhenaten, and definitely his successor after a short interlude consisting of Mysterious-Male-Pharaoh and Mysterious-Female-Pharaoh-Who-Was-Maybe-Nefertiti-Or-Maybe-Meritaten. In fact, Tutankhamun is the one who restored the traditional religion after the upheaval caused by his father, which you can tell from how he changed his name (Aten → Amun), before dying at the tender age of 18 or 19 and being immortalized with the most awesome funerary mask ever made.

King Tut is of course the most famous out of the at least 170 (and possibly more than 300) pharaohs who reigned from 3150 to 30 BC, thanks to the mask and the allegedly cursed discovery of his tomb a hundred years ago. So his relationship to Akhenaten provides us with a third reason to study him and his reign—although one that we didn't need, and one that we won't focus on, since the book being reviewed here is specifically about Akhenaten and Nefertiti. It is called *Egypt's Golden Couple: When Akhenaten and Nefertiti Were Gods on Earth*.



While we're here, I'll mention a bonus fourth reason to read this book: it was written in 2022 by another power couple, John and Colleen Darnell, American Egyptologists who happen to also be known as fashion models. Look at them, as seen on Dr. Colleen Darnell's Instagram account vintage_egyptologist, sailing on the Nile as if this were the 1920s or 30s:

Apparently they're a bit controversial! Not only did she rise in the ranks of the Egyptology department at Yale while dating him, an already married professor—a sexual scandal that tarnished the department's reputation; but also, their love of early 20th-century clothing and photoshoots among the ruins of Egypt has been heavily criticized as distasteful at best, and as insensitive "colonial cosplay" at worst. None of this matters for the book, which is considered to be scholarly sound. But it's another dramatic story! Sure, the Darnells may just be trying to attract attention—and it works! I was far more excited to read their book than another on Akhenaten that I attempted to dig into before narrowly escaping death by boredom.

But enough about them; let's go back to their book. Who were Akhenaten and Nefertiti? And what made them want to overhaul society, deemphasize the traditional gods of Egypt, and only worship the Sun Disk?

.

Amunhotep IV, the future Akhenaten, was born a prince to Amunhotep III, ninth pharaoh of the 18th dynasty in the New Kingdom period. If you know anything about the periodization of Egyptian history, you're probably aware that the New Kingdom is considered the golden age of Egyptian civilization; and the 18th dynasty may be seen as the peak of that golden age, rivaled only by the reign of Ramesses II in the 19th dynasty. Amunhotep III, who ruled for 37 or 38 years, is widely regarded as one of the greatest pharaohs of ancient Egypt.

Amunhotep III also holds the distinction of being the pharaoh with the most extant statues, about 250. Here he is represented by the two Colossi of Memnon, which still stand on the western outskirts of Luxor:

The Darnells (and I) bring up Amunhotep III in part to provide context on Akhenaten's early life, so that we know he was born in a period of unparalleled prosperity and kingly power. But the other goal is to show that Akhenaten's later actions were less unprecedented than it may seem at first glance.

For example, there exists a text, created during Amunhotep III's reign, telling of his conception by his mother, Mutemwia, and the god Amun-Re. Amun, during the New Kingdom period, rose from being the patron god of the city of Waset to reigning as the top god of the whole Egyptian pantheon, later being seen as an equivalent to Zeus and Jupiter. Eventually, he was merged with Re (or Ra), the famous sun god who was among the most important deities during earlier periods. So it made sense for Amunhotep III—whose name means "Amun is satisfied"—to claim that he was literally "one flesh" with Amun-Re thanks to the union of the king of the gods with his mother. We even have a depiction of the sexual act (don't worry, it's *very* tame):

The conception of Amunhotep III:
Mutemwia and Amun are lifted into heaven by two goddesses.
(Drawing of a scene in the divine birth chamber, Luxor Temple)

The Darnells tell us that “an ancient Egyptian would have noted the erotic overtones of Amun’s legs overlapping those of Mutemwia, how she cups the god’s elbow with her free hand, and he holds to her nose the hieroglyph for ‘life,’ the *ankh* sign. . . . the sexual nature of the scene is obvious.”

Anyway, the point is that Akhenaten’s father was already claiming to be descending from the sun god. It was written that he would “rule all that the sun disk [the aten] encircles”, a popular turn of phrase that pharaohs had been using for generations. And to celebrate his 30th regnal year, he resurrected an extremely ancient festival—the only evidence we have for it dates from around 3000 BC, so more than *1,600 years prior*—that involved sailing on boats representing the travel of the solar deity Re in the sky (during the day) and the underworld (during the night). “The king,” write the Darnells, “was expected to merge with Re after his death, but

Amunhotep III did something unprecedented: he sailed in the Day Bark and the Night Bark *while still alive.*" (Emphasis theirs.)

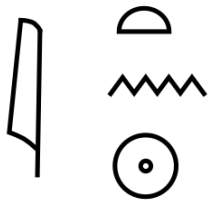
Also, just like his son would later do on a grander scale with his new city, Amunhotep III built a new palace complex near Waset, called Malqata, from which many surviving inscriptions show that he liked calling himself the "Dazzling Sun Disk". So by the time Akhenaten became pharaoh, at the age of somewhere between 10 and 23 (the Darnells' best guess is 13 or 14), the theme of identifying the king with the Aten was very much in the air.

□.

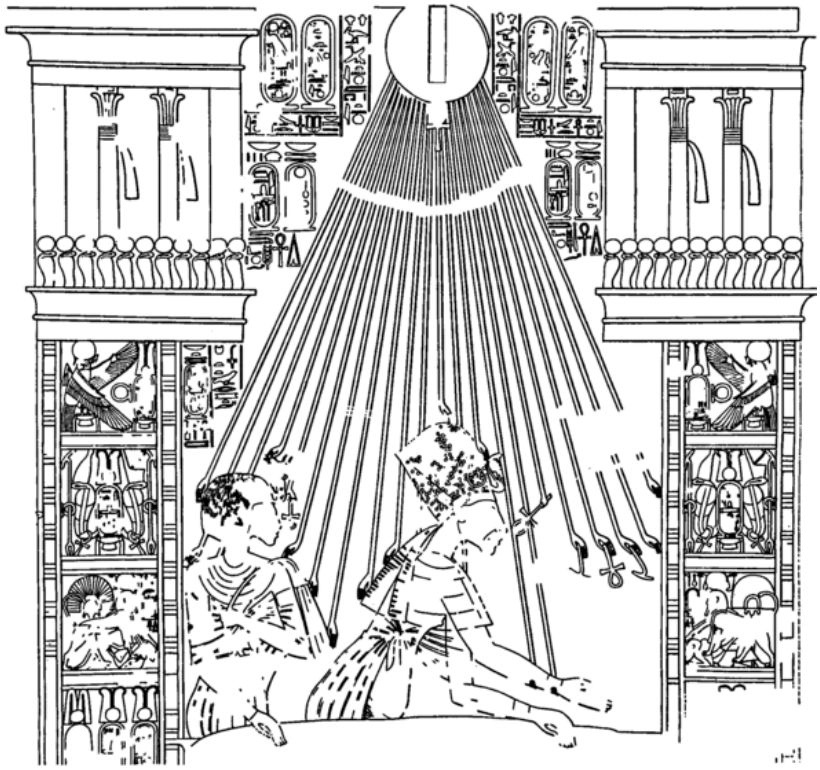
At first, Akhenaten—then still called "Amun is satisfied", fourth of his name, and reigning from Waset—modestly continued the work of his father. Amunhotep III had been adding parts to the great temple of Amun-Re at the Karnak complex, near the capital. Out of filial duty, Amunhotep IV completed some of them.

But almost immediately, he seems to have shifted the focus away from Amun-Re and towards a deified sun disk. Many of the temples he added to Karnak are Aten-themed, bearing names like "The Sun Disk is Found", "Sturdy are the Monuments of the Sun Disk Forever", and "Exalted are the Monuments of the Sun Disk Forever". In another of these temples, the Mansion of the Benben, he ordered the construction of a new Great Benben, a sacred obelisk, dedicated not to Amun but to "Re-Horus of the Horizon in his name of light who is in the sun disk", one of the more complicated ways to refer to Aten.

The Darnells explain that this shift in focus would have been unusual, but not overly so. The Benben, a representation of the first mound of land at the time of creation, had been an inspiration for sacred monuments at least since the Giza pyramids; dedicating it to a form of the sun god was "the continuation of solar worship that began over a thousand years before." And the word "aten", written with four hieroglyphs, □, □, □, and □, had been a common noun to refer to the sun as a disk in religious contexts since at least 2350 BC.



On the other hand, describing the actual *disk* as the solar god was clearly strange. Usually, Egyptian gods were human-shaped, animal-shaped, or human-animal hybrids (though there were exceptions). An aten could be an attribute of a god with an otherwise normal body; for example it is often seen on top of Re's head, whatever shape that head had (human, falcon, ram, beetle). But to depict as a deity the sun disk itself, round and often featureless except for rays terminating with hands holding the *ankh* sign, was totally new.



Drawing of a relief from the tomb of vizier Ramose, the first known work to show Aten showering the king and queen with his rays

Why did this theological change happen? Since the discovery of Akhenaten's existence in the 19th century, people have *loved* speculating about this. A popular explanation involves the supposed corruption of the Karnak priests of Amun: in this view, the pharaoh was a visionary leader who sought to diminish the power of a clergy more concerned with its own wealth and hedonism than the religious welfare of the people. Another view, perhaps taking inspiration from other tales of religious reformers, imagines him having received a prophetic revelation in a dream. Some also speculate that the religion came from the influence of his mother, Queen Tiye.

The problem with these theories is that there's literally nothing to support them. They're just guesses.

At the risk of stating the obvious, a difficulty when studying a figure who lived 3,300 years ago is that often, the only evidence you have is a single extremely fragmentary text whose meaning depends wildly on interpretation. Chapter 11 of *Egypt's Golden Couple* is a rather fascinating dive into one such piece of evidence, from Karnak, the only known inscription that provides a clue for the development of Atenism. Here is the translation given in the book, with tons of brackets to indicate missing and reconstructed text. See if you can make sense of it:

[. . .] Horus(?) [. . .]
[. . . temples(?) fallen into] ruin, without any (divine) beings [. . .]
[. . . royal(?)] august ones(?),” so say the knowledgeable ones [. . .]

Behold, I am speaking that I might cause (you) to know [. . .]
[. . .] manifestations of the gods, so that I might understand the temples [. . .]
[. . .] writings of the inventory of their majesties, the antiquity [. . .]
[. . .] which they **desire**, one after another, out of all precious stones [. . .]

[. . . who bore] himself, [whose] secrets cannot be known [. . .]
[. . .] he [coming(?)] to the place he has desired. They will not know his going [. . .]
[. . .] night; but I approach(?) [. . .]
[. . .] which he made, how exalted are they [. . .]
[. . .] their [. . .]s as stars. Hail to you in your rays [. . .]
[. . .] What is he like, another like you? You are [. . .]
[. . .] they [. . .] in that your name [. . .]

The Darnells explain that there are three sections, which I separated with paragraph breaks above: (1) “a description of the sad state of affairs the king as discovered” ; (2) “a proclamation of the royal solution to that awful situation”; and (3) “a hymn to the solar deity”. They further point out that this text has many parallels during the rule of earlier pharaohs: it was common to describe the king as the only person capable of solving a problem, like the temples having fallen into ruin. And here the solution seems to involve Aten, whose movements are unknowable and who has no other like him.

The interpretation of the middle part hinges on one verb, which I put in bold above. The Darnells translate it as “desire”, but earlier Egyptologists believed it was “cease”, as in “the statues of the gods in temples have ceased to work”. If you’re interested in the linguistics of Egyptian hieroglyphs, their explanation for this choice is worth reading. But to get to the point, their argument is that the previous view, which held that this text was a manifesto claiming that all the gods had ceased to be powerful except for Aten, is likely wrong. Instead the gods “desire” statues, and Amunhotep IV will be inventorying them in the temples across Egypt. There’s another record of such an accounting effort being made by him, so it fits. Conclusion: although Amunhotep IV was clearly already a pretty big fan of Aten, he was less monotheistic in his early reign as one may think. He was okay with the existence of other cults, and indeed would benefit from them by levying taxes on the temples.

It’s a less interesting story; it unfortunately tells us less about Amunhotep IV’s choice to worship Aten than we might have hoped. That’s what you get when you pay attention to the actual hieroglyphs, I suppose.

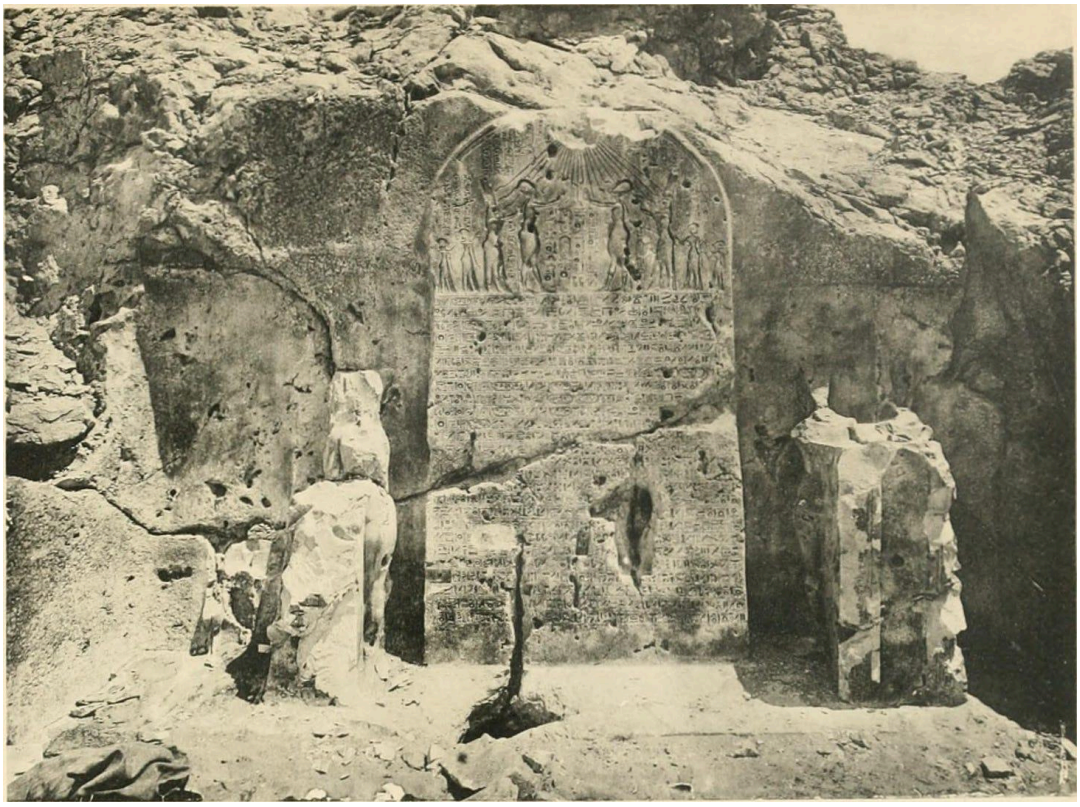
Amunhotep IV spent five years ruling from Waset in what can be seen as a transition period between the reign of his father and his more radical phase in his new capital city. The chronology of the events during this time isn't always clear and this whole part of the Darnells' book is somewhat confusing to read, but in addition to the theological reforms above, we know that:

- He married Nefertiti.
- He dedicated the Mansion of the Benben to her. In this temple, she is shown bearing the name Neferneferuaten ("Beautiful is the beauty of Aten"), making offerings to Aten, and smiting enemies. It was already clear, only a few years into their joint reign, that Nefertiti had an important role in Atenism.
- He began commissioning art in a revolutionary new style, today called Amarna art, with unusual ways to represent the king and queen, among other details. This is notable since Egyptian art tended to be conservative and changed little over centuries.
- He had his first daughter out of six, Meritaten ("She who is beloved of the Aten").
- He and Nefertiti celebrated their jubilee. A jubilee, or Sed festival, was something you celebrated when you had reigned for 30 years, and then every 3-4 years after that. Amunhotep IV didn't wait 30 years; he celebrated it in his 3rd or 4th regnal year. Charitably, the Darnells say it could have been meant as a continuation of the sequence of jubilees at the end of Amunhotep III's reign. Either way, it was probably intended to make it clear to everyone that Aten was now more important than all the other gods, with unique rituals such as presenting food offerings to the sun in open-roofed kiosks.

Eventually, though, Amunhotep IV had greater ambitions. We (think we) know the exact date of the foundation of his sacred city, Akhet-Aten: February 22, 1347 BC. Precise records exist thanks to a set of "boundary stelae" that were carved into the cliffs at the edges of the new city—the most important textual evidence we have of the period. On one of them, we can read this proclamation by the king (I recommend reading it out loud in a declamatory style):

> It is in this very place that I shall make Horizon of Aten [Akhet-Aten] for Aten, my father! I shall not make Horizon of Aten for him south of it, north of it, west of it, or east of it. I shall not go beyond the southern stela of Horizon of Aten toward the south, nor shall I go beyond the northern stela of Horizon of Aten toward the north, to make Horizon of Aten for him there. Nor shall I make it for him on the western side of Horizon of Aten. It is on the eastern side of Horizon of Aten that I shall make Horizon of Aten for Aten, my father—the place he made—that it might be encompassed for him by the mountain itself. Just as he shall attain happiness in it, so shall I offer to him in it. This is it!

A couple of things to note: first, Akhenaten refers to Aten as his father, as Amunhotep III had done with Amun; on other stelae, he also insists that the idea of founding the new city came from "Aten, my father". Second, that's quite a lot of insisting that *this* is the best place for the new city, and nowhere else. There's even another stela where he warns Nefertiti not to tell him, "Look, there is a good place for Akhet-Aten in another place"; he adds, "I will not listen to her!"

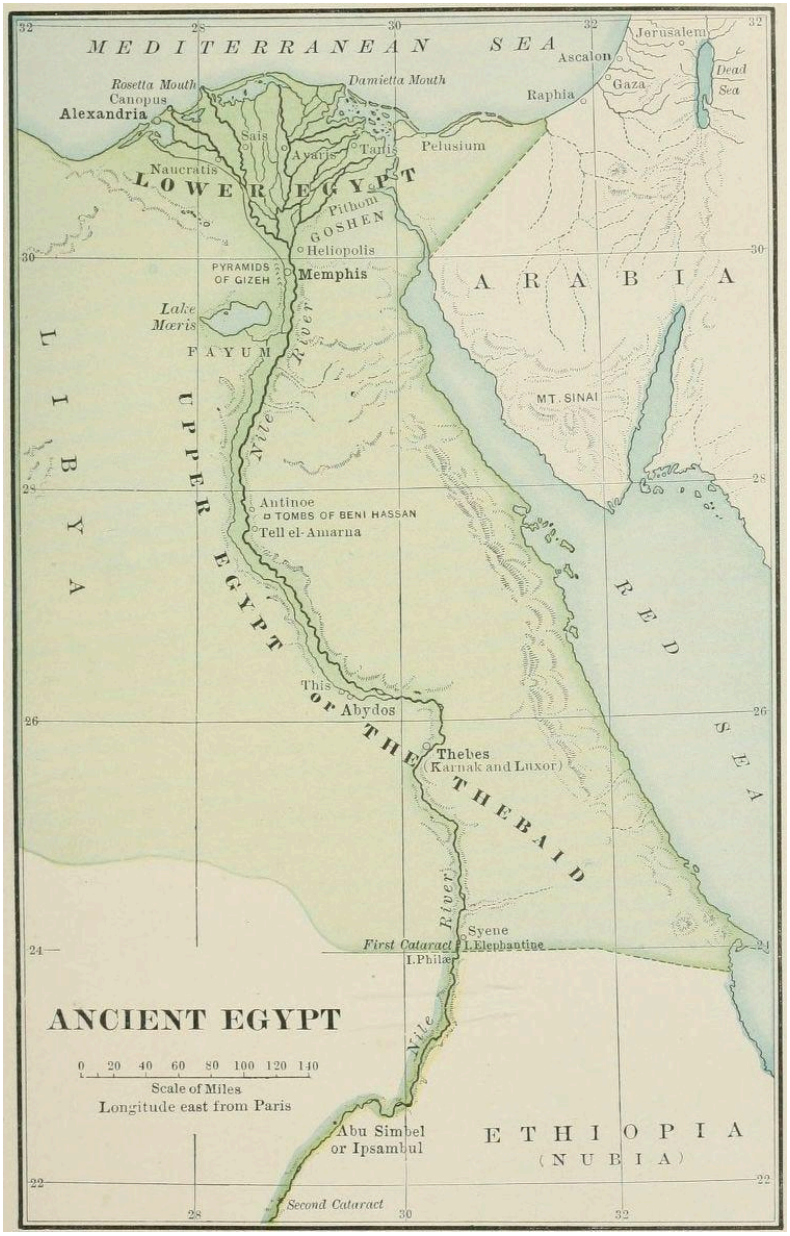


One of the stelae, photographed in 1903

Some of the other stelae are essentially lists of all the palaces and temples the king intended to build “for Aten, my father, in Akhet-Aten, in this very place.” For example, “the Estate of Aten, for Aten, my father, in Akhet-Aten, in this very place.” Or “the Mansion of Aten, for Aten my father, in Akhet-Aten, in this very place.” The pharaoh even says he will collect taxes to be “at the disposal of the Aten, my father in Akhet-Aten, in this very place.” One wonders if Egyptian proclamations were always this repetitive. At the very least, they show that the king’s devotion to Aten, his father, makes absolutely no doubt.

Oh, also—the stelae are the first documents on which he is called Akhenaten, rather than Amunhotep IV. A new phase in his life and reign had begun.

Akhet-Aten is today better known as Amarna or Tell el-Amarna, which are modern Arabic names. It is about halfway between Waset/Thebes/Luxor and Memphis/Cairo, nowhere near any big modern city. The site was also uninhabited when Akhenaten selected it.

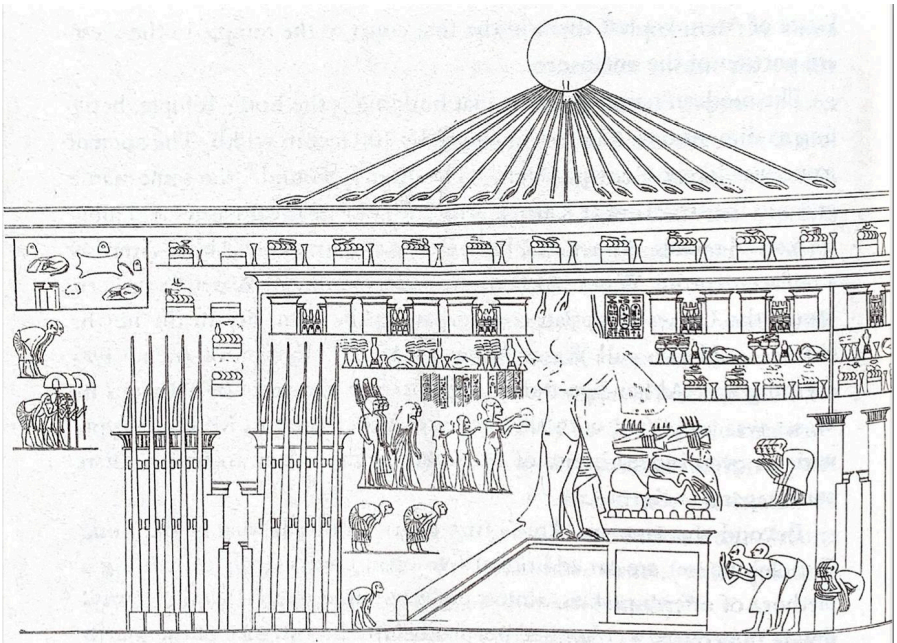


Akhenaten and Nefertiti ruled Egypt from Akhet-Aten for twelve years. Much of the second half of the Darnells' book is on the city and what we know from their life there. Even though the most interesting feature of that period is the increasingly radical religion of Atenism, it's important to remember that Akhet-Aten was also a normal capital city, housing some 30,000 people. To get an idea of what it may have looked like, I recommend the illustrations by the architect and archeologist Jean-Claude Golvin.

Because it was abandoned shortly after Akhenaten's death and has remained uninhabited since then, Akhet-Aten is the source of many a great archeological find. The workshop of the sculptor Thutmose was there; it gave us the bust of Nefertiti. There was an "Office of the Correspondence of Pharaoh" in which hundreds of letters were found; they're written in

Akkadian cuneiform, on clay tablets, and tell us a lot about the foreign relations of Egypt with the Middle East.

And then there were the actual temples and palaces. The two main temples to Aten—the Estate and the Mansion—were grander than their equivalents in Karnak. They were “open to the sky, the light-drenched spaces showing the god’s immanence within the sacred enclosure”. In the immense Estate of Aten, there were almost two thousand outdoor tables where the population of the city could pile up gigantic quantities of food as offerings to the sun disk. Fortunately, the Darnells reassure us that Aten had “no use for rotting meat and wilting lettuce, so people then consumed the actual calories after the sun disk had soaked up the metaphysical essence of the food.”



Akhenaten, Nefertiti, and the princesses making an offering to Aten in the Estate of Aten. (Drawing of relief from the tomb of Panehesy, after N. de G. Davies, The Rock Tombs of El Amarna, *vol. 2,* The Tomb of Meryra II *[London: Egypt Exploration Fund, 1905], plate 18)*

But the most enlightening find from Akhet-Aten, at least from the point of view of studying Atenism, has to be the Great Hymn to Aten.

It was discovered, almost undamaged, on the wall of a tomb intended for the courtier Ay—but which was never used since Ay survived Akhenaten and even became pharaoh after Tutankhamun. It is a long poem, the longest text from the period, in fact, other than the boundary stelae. It is written as if Ay were speaking, but it’s plausible that Akhenaten himself composed it. Here it is in full:

If you can't read Egyptian hieroglyphs, you may want to look up one of the many translations that exist out there. Or you could listen to part of it in song, set to the beautiful operatic music of Philip Glass. The Darnells, like everyone who has ever written a book about Akhenaten, also provide their own translation. I won't reproduce it in full, but here are some choice quotes.

The first few verses, on how Aten is awesome when he rises in the East:

> May you appear beautifully in the horizon of heaven, o living Aten,
> who initiates life,
> you having arisen in the eastern horizon.
> That you have filled every land with your perfection,
> is with you being beautiful, great, dazzling, and high over every land.

On how everything becomes much worse at night, when Aten isn't around—a time for thieves, lions, snakes, and death:

> When you go to rest in the western horizon,
> the land is in darkness in the manner of death,
> the sleepers in the bedchamber, heads covered.
> No eye can see another,
> so that all their possessions could be stolen—although they are beneath
> their heads—without them knowing.
> Every lion comes forth from his den.
> All serpents bite.
> The shrine grows dark, the land is silent.
> The one who made them has gone to rest in his horizon.

On how Aten is the only god and creator:

> How many are your deeds,
> although they are hidden from sight.
> The sole god with no other beside him.
> You created the earth according to your desire,
> you being alone

On how Aten is good even to the foreigners outside Egypt, being responsible, among other things, for rain (recall that Egyptian agriculture depends on the flooding of the Nile, not rain):

> As for all distant foreign lands,
> you make them live.
> That it might descend for them have you placed an inundation in heaven.
> That it makes waves upon the mountains like the sea
> is in order to water their fields with what pertains to them.

(It's pretty cool that the Hymn seems to attribute the water cycle to solar energy, which is correct, although I assume it's more an expression of generic divine power than a scientific explanation. I've read elsewhere that Akhenaten, in addition to being "the first individual" and "the first monotheist", was also "the first scientist" because his poetry displays some understanding of the effects of the sun on nature, though to be honest that seems like a stretch and the Darnells don't even bring it up.)

And lastly, on how Akhenaten (here referred to by another of his names, *Neferkheperure, Unique One of Re*) is the only person who is able to "know" Aten:

> There is no other one who knows you,
> except for your son, Neferkheperure, Unique One of Re,
> whom you cause to become aware of your plans and your power

As it turns out, this last bit may be the most important clue to explain Akhenaten's theology. It seems that the pharaoh's new cult had the effect of concentrating religious power onto his own person. "People can see the disk and feel its heat," write the Darnells, "but Aten is otherwise mute. Unlike other gods, Aten does not speak to anyone except the royal family. . . . At Akhet-Aten, even the high priests of Aten only interacted directly with the king, who acted as the intermediary between the priests and the gods they served."

It goes further. In the tomb of one of those high priests, there's a passage on how Akhenaten is "one who lives on *maat*". *Maat* is a complicated concept we might translate as "cosmic order". It was expected of pharaohs that they would ensure cosmic order remained in place, but Akhenaten went beyond that. The Darnells write that he "transgressed royal norms and usurped the role of a deity: he does not just 'bring about' *maat*, as was the king's duty, but lives on *maat*. Kings offer *maat* to the gods, but only gods live on *maat*."

Elsewhere we see an interesting parallel: a priest at Karnak wrote on a wall, shortly after Akhenaten's death (and therefore still during the period of official Atenism), a lament on how he felt abandoned by Amun, saying, "Joyous is the person who sees you, o Amun! He is in festival every day." Meanwhile, at Akhet-Aten, a tomb hymn ends with "Joyous is one who follows the ruler! He is in festival every day." Another sign that the pharaoh had usurped the role of the king of the gods.

So, was Atenism a form of monotheism? That depends on the precise definition, but you could argue for *no*: it elevated Akhenaten—and Nefertiti, who had a far more prominent role than queens usually got—as deities, forming a trinity together with Aten. The king and queen worshiped the Sun Disk, and everyone else, even high priests of Aten, worshiped the king and queen. People even had little stelae depicting the holy royal family on altars in their homes.

I appreciate that the Darnells hid this answer in plain sight: the subtitle of the book, remember, is *When Akhenaten and Nefertiti Were **Gods** on Earth*. Hardly monotheistic!

It would be tempting to interpret this self-deification stuff as an authoritarian power grab. The Darnells don't think so. Instead they view Akhenaten's religious reforms as the logical continuation of his father's reign. Amunhotep III had presented himself as the sun god (recall the business with the Day Bark and Night Bark), and Akhenaten simply built on this with some theological innovations. One of these innovations is that Aten was said to be responsible for all of creation, and even that the present *was* the time of creation. This would explain the quasi-monotheism: all the other gods must be ignored, since in the Atenist worldview they didn't exist yet. Only Akhenaten and Nefertiti were there, son and daughter of the Sun Disk at the beginning of the world.

Or something. These theological matters are confusing, and ultimately they're just a bunch of educated guesses by John and Colleen Darnell and the researchers they cite. Besides, it's not as if theology was strictly required to make a lot of sense, or to be separate from matters of secular power. There may not be evidence that Atenism was a pretext for a power grab, but the Darnells fail to convince me that it wasn't.

What we *do* know is that several years into his reign, Akhenaten became more radical. He changed the complicated version of Aten's name to remove references to other gods. It used to be "Re-Horus of the Horizon in his name of light who is in the sun disk"; it became "Living one, Re, ruler of the two horizons, who rejoices in the horizon in his name of Re, the father, who has returned as the sun disk", taking out Horus (the falcon god) and light, in Egyptian *shu*, because this word sounds the same as the god Shu. At the same time, he ordered workers all over Egypt to hack out specific words from inscriptions in temples and monuments: anything mentioning *gods*, plural, and especially anything having to do with Amun. However, most other gods (Osiris, Ptah, etc.) were not affected.

We don't have a direct explanation of why he did this, and I'm not sure I understand how the Darnells square his attack on Amun with "logically extending" the actions of Amunhotep III, for whom Amun was obviously super important. He may have believed that preemptively erasing the rival god would ensure the cult of Aten would be maintained after his death. If so, he failed spectacularly.

After seventeen years as the pharaoh of Egypt, Akhenaten died. We don't know from what. He would have been about thirty years old, assuming he became king as a young teenager. Nefertiti may have survived him and reigned as the mysterious Pharaoh Neferneferuaten, or she may have died around the same time as her husband.

As mentioned earlier, Akhenaten had a couple of successors (Smenkhkare and Neferneferuaten) with short reigns and unclear identities in what was likely a troubled period. Eventually Tutankhaten/Tutankhamun came to the throne, which by the way was an elaborately decorated gilded throne, complete with Aten showering him and his wife with rays of gold—

—and after spending a few years in Akhet-Aten, he moved back to Waset. He (or more likely his advisors, since he was very young) then embarked on a program to restore the pre-Aten religion. A stela erected at Karnak during Tutankhamun's reign positively *lambastes* Akhenaten:

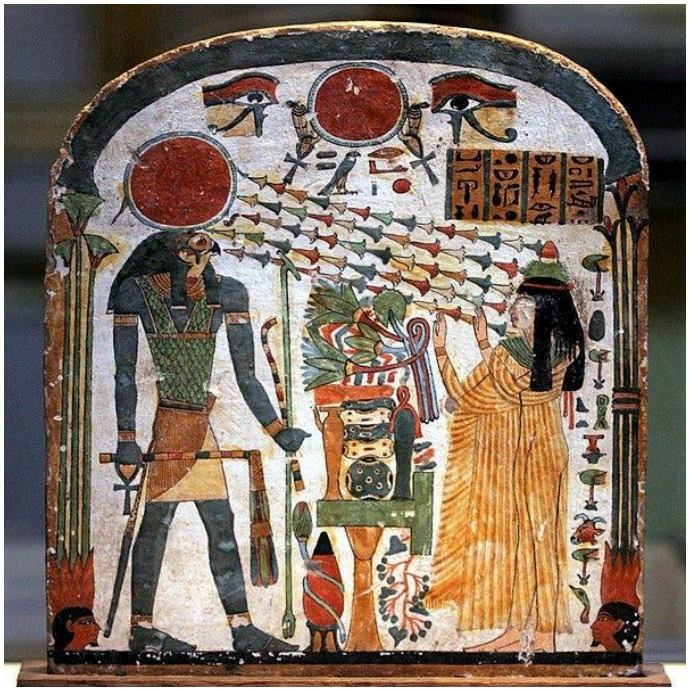
> The temples of the gods and goddesses beginning in Elephantine and ending at the marshes of the Delta [. . .] had fallen into ruin. Their shrines had fallen into decay, turning into mounds, overgrown with weeds . . . The land was in distress, and the gods ignored this land.

And so on about how the armies failed and the gods, when invoked for counsel, didn't respond. Meanwhile, Tutankhamun claimed to have restored the Karnak temples to surpass even "what was done since the time of the ancestors."

The Darnells are skeptical. They point out that even Akhenaten's own tomb builders kept worshiping other gods beside Aten. In fact, we don't really have any evidence that Akhenaten's theology affected normal people who weren't courtiers or priests of Amun. The cult of most gods likely continued unimpeded between Elephantine in the south and "the marshes of the Delta" in the north. Tutankhamun's proclamation was probably an exaggeration, based on true events, but primarily meant to brag.

Still, it's clear that Akhenaten, usurper of divinity and enemy of Amun, had become unpopular. His face was hacked out from most portraits and from his sarcophagus. His temples at Karnak were entirely dismantled. His city of the Horizon of Aten was abandoned and fell into ruin. Later, he was, together with Nefertiti and his successors including Tutankhamun and Ay, condemned to oblivion and removed from king lists. They'd be re-added only in the late 1800s AD, more than three thousand years later, when the city of Akhet-Aten was rediscovered.

As for Aten, his cult seemingly vanished and he became just a regular attribute of solar deities again.



Re-Horus of the Horizon with an aten sending out rays to ~~vaporize~~ bless a woman, from between 1065 and 664 BC

Why does the Sun not play a larger role in religion? I don't know. It certainly played a huge role in ancient Egyptian religion, and not just during Akhenaten's reign.

It would have been cool to be able to say, "The radical worship of a solar god during the Amarna period heresy stood as a warning for centuries, even subtly influencing Greco-Roman religion and ultimately Christianity so as to deemphasize the all-too-obvious power of the sun." I would have loved to find evidence, even thin, for an insight like that. But, as I rapidly realized while reading *Egypt's Golden Couple*, it would have been a wild, unsupported extrapolation, on par with Freud's theories around Akhenaten's Oedipal complex and Moses as an Atenist, or with the

idea that Akhenaten was a “scientist” because he recognized that the sun causes plants to grow and rain to fall.

The truth is, Atenism probably had very little impact on anything. And if it did, we have zero evidence for it. Many researchers have tried to find a link between this religion and the rise of monotheism in ancient Israel; a popular strategy is to compare the Great Hymn to Aten with Psalm 104 in the Hebrew Bible. But while there are some intriguing similarities, the scholarly consensus is that it’s all a coincidence. The cult of Aten was likely forgotten within a few generations, and wouldn’t have influenced any Jewish prophets.

You don’t win a book review contest by just summarizing some book—you need to use the book as a springboard to make some mind-blowing observation on society. This is doubly true of a book about ancient historical characters. Why would anyone care about Akhenaten and Nefertiti, if their story doesn’t provide any new insights?

I don’t have a great answer. The most I can offer is an epistemic warning. When studying a topic from ancient history—or anything really, but it’s particularly salient with ancient history because of the paucity of sources—it’s *always* tempting to speculate. And the wilder the speculation (Moses as a priest of Aten! Akhenaten as a totalitarian forerunner to Kim Jong-un!), the greater the temptation. We have to resist this. Don’t be like Freud!

To their credit, and despite (or because of?) their love of flashy vintage clothes, John and Colleen Darnell do a good job of resisting the temptation. Time and time again they demolish exaggerated claims about Akhenaten and Nefertiti, such as the idea that they were fighting a corrupt priesthood, the genetic defects the pharaoh supposedly suffered from, or the alleged sexual relations between him and one of his daughters. (It’s worth pointing out that they’re not always in agreement with the scholarly consensus, e.g. on the parentage of Tutankhamun or the identity of Pharaoh Neferneferuaten.) Occasionally you even get the sense that they’re going a bit too far—that they gave themselves the mission of defending two historical characters they love, denying any suggestion that Akhenaten and Nefertiti were bad people, which they may well have been.

Overall, the Darnells’ commitment to nuanced interpretation is great, but it comes at a cost: their book is less exciting, and more confusing, than I had hoped for. It doesn’t—it can’t—weave a biographical narrative that is coherent and compelling while remaining accurate. They try to salvage it by adding, at the beginning of each of the 31 chapters, a vignette reconstructing a relevant scene as it might have happened, but it doesn’t work that well. It comes across as a series of disconnected short stories and facts whose unifying point is hard to make out.

But it was worth reading. The story of Akhenaten and Nefertiti, fragmentary though it is, provides fascinating texture to the early history of the world, even without retorting to wild speculation. And the Great Hymn to Aten almost made me want to worship the sun, too.

… Or maybe that was an effect of witnessing the total solar eclipse that traversed North America last April, while I was in the middle of reading the book. Speaking of which, *another* piece of

speculation about Akhenaten is that he may have been influenced by the total eclipse of May 14, 1338 BC, whose area of totality included Akhet-Aten. Depending on the exact chronology of his life, that could have inspired his religion altogether, or perhaps more likely, his radicalization at the end of his reign. Or it could have led to the abandonment of the holy city.

Or none of the above! We have no evidence for any of this, other than a single tomb painting where Aten seems to wear jewelry (that's how the Darnells see it; they don't mention eclipses at all) but that some have interpreted, rather fancifully, as an obstruction of the rays that could be the moon.

We'll never know. But I can't resist pointing out that one of the upcoming total eclipses, scheduled for August 2, 2027, will cast its shadow over both Luxor and Amarna. It probably won't reveal any new information about Akhenaten, his mummy won't wake up or anything, but an eclipse over the birthplace of the most sun-obsessed religion in history certainly feels poetic.

If you choose to attend, though, be careful: every lion will come forth from his den, all serpents will bite, and the land will be in darkness in the manner of death. Fortunately, this will last only six minutes, and then Aten will fill the land with his dazzling perfection once again.

Elon Musk by Walter Isaacson

Elon Musk
by Walter Isaacson
Simon & Schuster
November 2023
615 pages

Headline: Canada has played outsized role in Musk's Martian ambitions

Blame Canada for Elon Musk. Or credit the Great White North with jump-starting Musk's rise to prominence.

That's one take-away from Walter Isaacson's comprehensive biography of the billionaire technocrat whom people, journalists in particular, love or hate, or love to hate.

Isaacson's book offers ample material to bolster the entrenched views of Musk fanboys and detractors alike. For mere mortals, it offers insights into what motivates Musk while revealing his strengths and weaknesses, warts and all.

An overarching message that shines through is that, adore Musk or despise him, people underestimate him at their peril — as those who shorted Tesla stock discovered.

Candid insights

Unlike many other journalists who write about Musk derisively in passing, Isaacson actually talked frequently and candidly with the man himself, as well as with many of those closest to him. Isaacson also observed Musk in action, observations woven throughout the narrative. It's the kind of comprehensive access that few disinterested biographers ever attain.

Contrast that approach with what Crawford Kilian of *The Tyee* wrote recently. Kilian confidently predicted that billionaire Musk wouldn't be able to survive on a desert island.

The Tyee columnist was imagining Musk as the hapless scion Thurston Howell III on Gilligan's Island and not Musk as the engineer that he is. Musk more resembles the Professor — except Musk would figure out how to build a craft to escape the island. Born and raised in South Africa, Musk attended that country's notorious veldskool, a wilderness survival camp, in his youth. It's like Outward Bound or Katimavik — if those programs expected participants to die on occasion. So, yeah, Musk would probably survive just fine on a desert island.

As Isaacson makes clear in the acknowledgements, Musk didn't read the text in advance of publication, nor did he ask to read it. So this is a dispassionate and balanced account of what Isaacson perceives to be a historical figure, as he is making history. Considering that Isaacson's

other biographical subjects include Leonard da Vinci, Benjamin Franklin, and Albert Einstein, it's fair to presume that the author regards Musk as a significant player in the course of human events. (Isaacson is no slouch either. Aside from authoring many books, he has been a Rhodes scholar, CEO and chairman of CNN, and the editor of Time magazine.)

Coming to Canada

As Isaacson soon reveals, Musk wasn't exactly born into wealth. His father, Errol, was a sometimes successful businessman but just as often a business failure.
When Elon came to Canada as a teenager in 1989, he arrived with about $4,000, half each from his parents, who had divorced a decade earlier.

"Otherwise, what he mainly had with him when he arrived in Montreal was a list of his mother's relatives he had never met," Isaacson writes.

(A few years later, during one his successful streaks, Errol gave Elon and his younger brother Kimbal, who had also come to Canada, $28,000 to help finance their first business venture. Their mother, Maye, also chipped in $10,000 and let the boys use her credit card.)

Elon had originally planned to emigrate to the U.S. to seek his fame and fortune. But when he discovered that the U.S. immigration system was too daunting, he decided to come to Canada instead. Since his mother was born in Canada, Elon was able to apply for and quickly obtain Canadian citizenship (which he holds to this day, even though he is also now a citizen of the U.S. as well as of his native South Africa).

His mother had (and has) relatives across Canada. One of Elon's first acts was to buy a $100 six-month bus pass and traverse the country to meet many of them. He even ended up Vancouver, where he got a job cleaning out boilers in a mill. (Isaacson says it was a lumber mill but what he describes rings more like a pulp mill. In any case, Musk told the biographer, "It was like a Dickensian steampunk nightmare…")

Not long after the nightmare, Musk enrolled at Queen's University in Kingston, Ontario, where he forged one of his most enduring friendships, with Navaid Farooq. Musk also had his first taste of the business and financial world at Scotiabank, where Kimbal also got a summer job. Their boss was Peter Nicholson, then in charge of strategic planning for the bank.

Elon "came away with the impression that the bank was a lot dumber than it was," Nicholson told Isaacson. "But that was a good thing because it gave him a healthy disrespect for the financial industry and the audacity to eventually start what became PayPal."

Banking on Canadian advice

Shortly after his stint with Scotiabank, Musk called Nicholson for advice on whether to go to Stanford University or work with Kimbal on an interactive version of the Yellow Pages they called the Virtual

City Navigator. Nicholson's advice: "The Internet revolution only comes once in a lifetime, so strike while the iron is hot," he reportedly told Musk as they strolled along the Lake Ontario shoreline. The Musk lads eventually turned Virtual City Navigator into the startup Zip2. But not before the president of the *Toronto Star*, which published the city's Yellow Pages, showed them what he thought of their idea by tossing a copy of the Yellow Pages at Kimbal. Two years later, 140 newspapers, including the Star, were licensing Zip2. And in January 1999, the Musk boys cashed out — $22 million for Elon, and $15 million for Kimbal.

As we all now know, that was just the beginning. (Isaacson recounts this windfall on page 64 of his 615-page tale.)

One indulgence of the nouveau riche Elon was a $1 million McLaren sports car. It would become a prop in one of the more telling anecdotes in the book. Musk was driving it with his future PayPal partner Peter Thiel in the passenger seat. Thiel asked "what can this car do?" and Musk proceeded to floor the accelerator. The result was a spectacular crash that shredded parts of the body. "Thiel, a practicing libertarian, was not wearing a seatbelt, but he emerged unscathed," Isaacson wrote. Musk wasn't hurt either.

Musk said later that it showed Thiel he wasn't afraid to take risks. Thiel meanwhile realized Musk was "a little bit crazy."

Musk, of course, didn't start PayPal. Nor did he start Telsa, or even what would become SpaceX. But he did take those companies from small time to much bigger things.

The origin of X

PayPal was originally the person-to-person payment system of a company that Thiel and another partner had started and which was in competition with X.com, a company Musk had founded with a friend who had worked with him at Scotiabank.

Musk envisioned X.com as a way to disrupt the banking system, an idea he had pondered since that summer at Scotiabank. That's just one of the eureka moments in Isaacson's book. Musk changed the name of Twitter to X because he still has grand ambitions for X.com and is looking at the former Twitter platform to pursue them.

Of late, X looks more like a dumpster fire than a disruption of an entire industry. But those who are ready to write it off should recall the miscalculation of investors who shorted Tesla stock. Isaacson helpfully explains how they were short-sighted about Musk.

They were certain that Musk would miss key commitments to ramp up Tesla production because he wouldn't have the time or resources to build the necessary facilities. What they didn't realize is that Musk is a keen student of history. He knew that during the Second World War, the U.S. government ramped up production of bombers by setting up production lines in aerospace company parking lots.

Musk tore that page out of the history book and set up a huge tent to ramp up Tesla production, catching the short sellers with their pants around their ankles.

(Musk still hates short sellers to this day. Indeed, as Isaacson recounts, when Bill Gates was trying to recruit to him join the club of billionaires who are pledging away their fortunes to good works, Musk wanted to know if Gates still held short positions on Tesla.)

No work-life balance

As a businessman, Musk is utterly ruthless, as Isaacson documents in detail.

“From the very beginning of his career, Musk was a demanding manager, contemptuous of the concept of work-life balance,” Isaacson writes.

Few people would want to work for such a martinet. That’s OK. Musk doesn’t want most people to work for him anyway. He is a workaholic who also wants his employees to put their work ahead of everything else.

“He scorned successful people who liked to vacations,” Isaacson writes.

Musk has no time for diversity, equity and inclusion, either. He’s all about the meritocracy. (Except for those cases of nepotism involving his brother and their cousins, although Elon also fired some of the cousins.)

Much has been made in the press about the massive layoffs he oversaw at Twitter. Isaacson reviews the methods behind that seeming madness once Musk discovered that most of Twitter’s software engineers weren’t writing much code at all.

“Let’s figure out who did a nontrivial amount of coding, then within that group who did the best coding,” Isaason quotes Musk.

So Musk had some trusted lieutenants weed out those who wrote the most code, also checking that it was of superior quality. He offered the best of those coders continued employment and gave the rest severance packages.

As Margaret Mead would say

In a perverse way, it’s a manifestation of anthropologist Margaret Mead’s aphorism, “Never doubt that a small group of thoughtful, committed, citizens can change the world. Indeed, it is the only thing that ever has.” In fact, Isaacson quotes Musk as uttering almost precisely that: “I’m a big believer that a small number of exceptional people who are highly motivated can do better than a large number of people who are pretty good and moderately motivated.”

In the case of Musk's managers at SpaceX that has meant agreeing to a meeting every night, seven days a week. It's a gruelling schedule that can and does lead to burnout.

But as one of his long-suffering employees, who quit Tesla because he was burned out only to return later to Musk's employ, told Isaacson, "I decided I'd rather be burned out than be bored."
One thing that can be said of Musk is that he isn't boring, even if one of his more dubious (so far) ventures is called the Boring Company.

To say that Musk burns the candle at both ends is an understatement. Isaacson fails to explain when his subject sleeps. For when Musk isn't working until all hours, he will find diversion in long bouts of video gaming.

Somehow, despite that and his admitted awkwardness in social situations, Musk has managed two marriages and other romantic relationships. He has fathered 11 children, all with Canadian women, and is a huge proponent of people having children, particularly if they'll help populate Mars. Musk even told one of his youngest, a boy named X, that he will live on Mars one day as the toddler peered at the Red Planet through a telescope.

Musk is living in a science fiction novel of his own imagination and the rest of us are just characters in the story. Or so it can seem.

His Canadian children

Most of Musk's children were conceived in vitro. One of the mysteries that Isaacson leaves unexplored is why? Given that Musk has fathered children with three different women, it might be fair, if impolite, to ask if he has the fertility problem.

His romantic partners and children feature a lot of Canadian content. Canadian author Justine (Wilson) Musk is mother of his first six children, including the eldest who succumbed to sudden infant death syndrome. Canadian singer Grimes is the mother to three of Musk's children, including one who was delivered by a surrogate. The latter occurred at almost the same time as another Canadian woman, Shivon Zilis, birthed twins, also fertilized in vitro.

Musk thinks there should be more humans in the universe and he is doing his part to stimulate that. He obsession is to send humans to Mars, which is the singular focus of SpaceX. From a distance, it can look like a narcissistic vanity project. That doesn't mean, it won't succeed. Again, underestimate Musk at your peril.

"My biggest concern is our trajectory," Isaacson quotes Musk. "Are we on a trajectory to get to Mars before civilization crumbles."

His progressive proclivities

While as a boss Musk exhibits all the traits of an autocrat, it's inaccurate to portray him as a far-right lunatic. He characterizes Donald Trump as "the world's champion of bullshit," even if he did agree to let him return to Twitter. But Musk draws a free-speech line somewhere. And that line is one he won't allow Sandy Hook massacre conspiracy theorist Alex Jones to cross.

"My firstborn child died in my arms," Isaacson quotes from a Musk tweet in one of the book's most poignant passages. "I felt his last heartbeat. I have no mercy for anyone who would use the deaths of children for gain, politics or fame."

That quote alone shows that Musk has at least a bit more humanity than most of his critics give him credit. Isaacson provides ample evidence that Musk isn't just a money-grubbing billionaire. He did once own a $32 million mansion and other homes but he sold them in 2020 — primarily to show that money isn't that important to him. He mostly rents homes now, or even with friends. However, since he has such a huge family, he often has to stay somewhere spacious, such as an 8,000 square foot home owned by a former PayPal colleague. At other times, he'll stay at one of the homes owned by fellow billionaire tech bro Larry Ellison.

Musk didn't exactly take a vow of poverty, although he did tell podcaster Joe Rogan, "I think possessions weigh you down and they're an attack vector," Isaacson recounts.

Musk critics often write about the occasions when his companies, especially during their formative stages, paid little or no income tax. But Isaacson reports that Musk once paid the largest income tax bill of all time — $11 billion.

Not a big tax fan

Not that Musk likes paying taxes. He's libertarian enough to believe that governments, and charities, don't always spend their money wisely.

More recently, after publication of Isaacson's book, Musk was in the news again when a judge voided a $56 million pay package for him from Tesla.

"The incredible size of the biggest compensation plan ever — an unfathomable sum — seems to have been calibrated to help Musk achieve what he believed would make 'a good future for humanity'," Judge Kathaleen McCormick wrote in her 201-page opinion, according to Reuters news agency.

That would jive with an overarching theme of Isaacson's book: that nobody — not the government or company shareholders — knows how to spend money more wisely than Musk for the sake of mankind's future.

Musk's political outlook, though, isn't just that of a skinflint conservative. He favors, for example, a universal basic income when artificial intelligence ends up doing almost all the work. Of course, his

ideas about AI are that we should tread carefully along that path and are at odds with the opinions of the likes of Google's Larry Page.

Musk favors transgender rights. That's understandable. His eldest surviving child transitioned from male to female. They're estranged, though, not because of the gender transition but because she has become a woke hater of billionaires. It's something Musk attributes in part to the "progressive woke indoctrination that pervaded the Los Angeles private school she attended," Isaacson writes. Musk isn't a climate change denier either. That's why he's building electric cars, after all. And, he has a clear vision for the human race — to become a multi-planetary species. If Musk can steer SpaceX into accomplishing that goal, future historians will surely read Isaacson's book to gain insights into how that happened.

The literal father of Mars

Should humans colonize Mars, it's conceivable that, in a millennium or so, every Martian will be a direct descendent of Elon Musk. (That only sounds absurd. It turns out that almost everyone of European descent can trace their ancestry back to the Frankish king Charlemagne. Like Musk, Charlemagne produced issue in the double digits, spreading his seed to eternity.)

That means future Martians will also trace their roots through Canada.

As a businessman, Musk can come across as uncaring about the people who toil for his companies. A boss cannot be a nice guy, he says.

"One of his maxims is that managers should not aim to be liked," Isaacson writes.

And Musk is the ultimate boss, an alpha dog, a control freak. He has dozens of direct reports at his various companies — at least 15 at SpaceX, about 20 at Tesla, and more than 20 at Twitter. How he keeps things straight in his head is a mystery or a miracle.

"It's hard to change destiny. You can't do it from nine to five," Isaacson quotes Musk.

His algorithm rules all

At the heart of Musk's business thinking is "the algorithm." Among its precepts are "delete, delete, delete," and be prepared to restore at least 10 per cent of those deletes because if you don't have to do that then you didn't delete enough in the first place.

"The algorithm" also involves questioning every specification. If necessary, that means finding the individual who wrote the spec and having that person explain why it exists. One of Musk's great realizations is that specifications aren't pronounced from on-high but are the product of fallible human minds. At other times, finding that answer can mean resorting to first principles to create a spec from scratch.

“All requirements should be treated as recommendations, he repeatedly instructed,” Isaacson writes. “The only immutable ones were those decreed by the laws of physics.”

Application of “the algorithm” has enabled his companies to reduce the costs of space ships and electric cars. The rocketry savings proved relatively easy. NASA had fostered a bloated and highly risk-averse industry where Musk discovered it was possible to replace a $120,000 actuator, which resembled a garage door opener, with a part his engineers could craft for $5,000. Another time, his engineers modified a bathroom stall latch that they bought for $30 to replace a $1,500 NASA latch. Even in the automotive sphere, Musk improved upon the assembly-line innovations of Henry Ford and the lean manufacturing techniques of Toyota to make EVs more affordable.

Another innovation that Musk refined was to bring designers and engineers together, as Steve Jobs had done at Apple. Rather than have designers sketch machinery that defied the laws of physics and bamboozled the engineers, the engineers would deflect those design flights of fancy before they melted in the sun. Yet at the same time, the designers would also the nudge the engineers right to the edges of what is physically possible.

“In some ways, Musk was like Steve Jobs, a brilliant but abrasive taskmaster with a reality-distortion field who could drive his employees crazy but also drive them to things they thought were impossible,” writes Isaacson, who had earlier written a biography of Jobs.

Humorous hubris

Sometimes “the algorithm” proves fallible, though. One humorous bit of hubris occurred shortly after Musk acquired Twitter. He wanted to move the Twitter servers to a new location to save money but senior Twitter engineers advised him that it would be a complicated, time-consuming and costly undertaking. Musk dismissed those warnings, figuring it would be a lot cheaper to hire a “motley” moving company and augment that with his own muscle and that of some of his cousins.

The move was cheaper, but only to a point. It turned out that the rough handling of the servers destroyed critical systems and data that couldn’t be recovered. Oops. At least Musk did ultimately confess that he had made a mistake.

“Musk has an intuitive feel for engineering issues, but his neural nets have trouble when dealing with human feelings, which is what made his Twitter purchase such a problem,” Isaacson writes. Twitter managers also hadn’t figured out how to deal with the mercurial Musk, unlike those in key roles at his other companies who had “learned ways to deflect his bad ideas and drip-feed him unwelcome information,” Isaacson notes.

Musk himself isn’t entirely oblivious to his own shortcomings. “My main regret is how often I stab myself in the thigh with a fork, how often I shoot my own feet and stab myself in the eye,” he told Isaacson.

The last word is physics

It’s fun, particularly for billionaire-hating journalists, to watch Musk self-inflict such wounds. But the man himself, like him or not, just shrugs it all off. A better Musk quote from Isaacson that captures his essence is this one: “Physics doesn’t care about hurt feelings. It cares about whether you got the rocket right.”

History will judge how Musk succeeds in that effort.

End Times: Elites, Counter-Elites, and the Path of Political Disintegration, by Peter Turchin

Or: has Peter Turchin solved history?

One day last year I found myself wondering why the United States is such a mess, so I picked up a book by Peter Turchin called *End Times: Elites, Counter-Elites, and the Path of Political Disintegration* (Penguin Press 2023). Turchin has a reputation for applying big data methods to the study of history. He started out building databases and models as a population biologist and then decided it would be interesting to see if he could describe and predict the behavior of large groups of people.

I know what you're thinking, and the answer is yes, Turchin has read the *Foundation* trilogy by Isaac Asimov. Turchin has read widely for a database guy, and he gives credit to others including Ibn Khaldun, Leo Tolstoy, and especially a historian named Jack Goldstone who pioneered one of Turchin's more important analytical frameworks involving historical cycles.

Unfortunately, it turns out that *End Times* is essentially *Turchin for Dummies*. I am a dummy; or to be more precise, I am an English major. Nevertheless, I wanted more from an author whose claim to fame is his quantitative approach. *End Times* includes some interesting observations about instability in the United States today, but it generalizes pretty broadly about the data and largely fails to explain how Turchin's database and models work, even in the explanatory appendices. I did not feel that Turchin had sufficiently distinguished himself from other popular cycle-mongers such as William Strauss and Neil Howe.

So, I dug into Turchin's back catalogue. This is officially a review of *End Times*, but with a lot of help from other books and some sources available on the internet. To Turchin's credit, many of his articles and database materials are not paywalled. My conclusion is that Peter Turchin has not solved history, but he has some good ideas that are worth thinking about, especially if you're wondering why the United States is such a mess.

I'll begin with brief summaries of four books by Turchin, including *End Times*. Then I'll address a series of questions that are likely to come up if you try to read *End Times* by itself.

War and Peace and War: the Rise and Fall of Empires (Penguin 2006)

This is perhaps the most enjoyable of the books mentioned here, if what you enjoy is a thesis-driven romp through several thousand years of mostly Euro-mediterranean history. *War and Peace and War* provides many interesting examples to illustrate the arguments, but since this is not a review of *War and Peace and War*, I will only provide a skeletal outline of the concepts that are helpful to understanding *End Times*.

A basic premise of *War and Peace and War* is that modern social scientists, especially economists, have erred in focusing on self-interest when trying to explain human behavior. All the interesting things in human history resulted from humans figuring out how to overcome selfishness and cooperate on a large scale. With that in mind, *War and Peace and War* has three basic ideas relevant to this review:

1. Asabiya. Populations living in conflict zones between clashing civilizations develop an exceptional ability to cooperate for self-protection. Turchin calls this ability to cooperate asabiya, borrowing the term from Ibn Khaldun, a 14th century Islamic scholar. Asabiya includes both fighting spirit in war and the ability to govern effectively in peace. Asabiya can be roughly quantified, mostly by looking at results. A population with lots of asabiya can conquer an empire and then govern it effectively, at least for a while. A population with middling asabiya can govern and defend a middling country with middling effectiveness. When a population has low asabiya, the elites steal everything and the poor suffer what they must – in other words, they act like economists.

Turchin does not express an opinion as to whether high asabiya emerges through a learning process or a darwinian selection process, but it takes a long time and historically it only seemed to happen in extreme conflict zones. Keep in mind that Turchin is only making an observation about the rise and fall of empires historically. Turchin also does not express an opinion about whether we should want to develop imperial levels of asabiya in modern societies. Perhaps we

would be better off living in middling countries with middling levels of asabiya and not attacking each other. But two thousand years ago if you were surrounded by Gauls and Huns and Visigoths, a high level of asabiya was pretty useful.

2. Cliodynamic cycles. Turchin proposes that a substantial part of all history since the adoption of agriculture can be explained by nested cyclical tendencies operating on three different time scales. This theory of nested cycles is the basis for the method of analysis Turchin calls "cliodynamics." Turchin does not consider the cycles to be deterministic because outcomes depend on the choices made by the people and the cycles can vary quite a bit in length, but the cyclical tendencies continue to operate in the background and they seem to be pretty powerful.

The longest cycle is the amount of time it takes to develop enough asabiya to launch an empire, and then the time it takes to dissipate the asabiya once the empire starts to become decadent. This takes at least several hundred years, and often more like a thousand years. *War and Peace and War* is mainly about Eurasia, but Turchin notes that the United States achieved imperial (or near imperial) levels of asabiya because of the lengthy and brutal wars between settlers and native Americans. Turchin doesn't say it in so many words, but because the settler wars are over, the United States no longer qualifies as a place to build asabiya by traditional means; it would follow logically that the United States is either at a plateau or declining in its traditional asabiya and ability to project imperial power.

The middle cycle is called a secular cycle, consisting of an integrative phase when a society is building itself up and a disintegrative phase when the society experiences internal conflict. This cycle is what the subsequent books are mostly about. The secular cycle is based on structural dynamic factors including the tendency to overpopulation when things are going well, and the tendency of elites to take advantage when they can. Whether a society is integrating or disintegrating, it will continue to do so until the structural-dynamic fundamentals change direction. Secular cycles can range from about 100 to 300 years, and it usually takes multiple secular cycles to complete each leg of an asabiya cycle.

The shortest cycle is called the "fathers and sons" cycle, consisting of a generation that engages in a lot of conflict, followed by a generation that avoids conflict. This cycle lasts about 40-60 years, and is more prominent in

disintegrative phases because that's when conflict is more of an issue. Violence is likely at the high point of conflict, and this may present an opportunity for a directional change in the secular cycle, but it often takes more than one cycle of violence to achieve a change of direction and bring an end to a disintegrative phase.

3. Identification of variables. Turchin's approach is supposed to be based on data and modeling, so we need to identify variables and collect data, right? *War and Peace and War* talks about this, but the book is mainly about fitting the big-picture theories to historical examples. Sooo many examples, but not a lot of detail about how the variables are defined or how they interact.

The variables driving the asabiya cycle seem to be relatively simple. Historically, the main way to create an imperial level of asabiya was for a cultural group to survive through long periods of horrible genocidal warfare on a frontier between clashing civilizations. The main way of dissipating asabiya was by developing extreme levels of inequality once you had an empire with excess wealth. Turchin is clear on that last point – in the long run, extreme inequality destroys the ability of a society to cooperate effectively.

Other variables affecting the development of imperial states include the distribution of wealth and power, ethnicities encompassed in the group, availability of discipline from moralists, and the development of symbolic signaling. These variables seem to be of lesser interest to Turchin because they do not have the large-scale, consistent impact of asabiya, so he has not figured out how to model them. This is theme in Turchin's work – he does not pretend to be able to model everything. If you ask "what about X?" the answer is often "we treat X as an exogenous variable and attribute random impacts when we run multiple iterations of the model."

Turchin describes a secular cycle thusly:

> Stability and internal peace bring prosperity; prosperity causes population increase. Demographic growth leads to overpopulation; overpopulation causes lower wages, higher land rents, and falling per-capita incomes for the commoners. At first, low wages and high rents bring unparalleled wealth to the upper classes, but as their numbers and appetites grow, they

> too begin to suffer from falling incomes. Declining standards of life breed discontent and strife. . . .
>
> The collapse of order brings in its wake the four horsemen of the apocalypse—famine, war, pestilence, and death. Population declines, and wages increase, while rents decrease. As incomes of the commoners recover, the fortunes of the upper classes hit bottom.

War and Peace and War at 257. A disintegrative phase generally only ends when the excess elites have been eliminated by factional fighting, foreign wars, or plain old downward mobility. At that point the share of wealth that the elites siphon from the populace returns to a more sustainable level. The key variables for diagnosing a disintegrative period are popular immiseration, too many elites competing for the available spoils, and increasing governmental dysfunction. Of these, the excess elites seem to be the most predictive factor, probably because elites have most of the power in a society by definition.

The fathers and sons cycle does not really have any interesting variables. Violence ebbs when people get tired of it, and then makes a comeback when people have forgotten how unpleasant it is. This takes about 50 years on average.

In the concluding chapters of *War and Peace and War*, Turchin admits many critics do not believe ancient history is useful for analyzing the world today. Turchin expresses hope that under modern conditions, people will be able to improve their large-scale cooperation skills without going through the thousand-year asabiya cycle and without being caught up in genocidal violence.

Ages of Discord: A Structural-Demographic Analysis of American History (Beresta Books 2016)

Ages of Discord picks up where *War and Peace and War* left off, applying the frameworks based on ancient history to see if they hold up when applied to the United States up to the present day. But *Ages of Discord* is much more technical than either *War and Peace and War* or *End Times*. It explains how Turchin's models are constructed, which variables he treats as exogenous, and how he decided to focus on certain data sources. *Ages of Discord* has as many equations and graphs as *War and Peace and War* has obscure historical

anecdotes. If you're the analytical type, I suggest buying *Ages of Discord* and keeping it handy while you're reading *End Times*. *Ages of Discord* will answer many of your questions about how Turchin reached his conclusions in *End Times*, and it is organized in a way that makes it relatively easy to find an explanation on a specific subject when you want it. It is recent enough that Turchin's methods and conclusions have not changed all that much.

The gist of *Ages of Discord* is that the United States is in the disintegrative phase of its second secular cycle. First there was an integrative phase from the 1780s to about 1830 when things seemed to be going well. Then the trend changed. The poor started getting poorer, the rich started getting richer, and political consensus disintegrated. Extreme levels of instability led to the Civil War, but that didn't actually change the factors that control the secular cycle. After the Civil War things quieted down a little, but throughout Reconstruction and the Gilded Age in the late 19th century, the rich kept getting richer and politics kept being turbulent. Finally, beginning in the Progressive Era and culminating with the New Deal in the 1930s, a political consensus developed that led to reforms. This changed the trend and ended the first secular cycle.

The second integrative phase in the United States lasted from about 1930 to 1980. Wealth and income inequality went down and politics was a lot calmer for most people. Turchin recognizes that this benefited white people the most, but the overall trend was toward less political violence and instability. The trend changed again around 1980, when elites got tired of paying high taxes and started agitating for business-friendly policies. Since then we have been in our second disintegrative phase, and measures of political instability are once again reaching extreme levels.

A general point in *Ages of Discord* that becomes important to understanding *End Times* is that Turchin recognizes four types of ruling elites – military, ideological/religious, bureaucratic (based on centralized state power), and plutocratic (based on wealth). Different countries are dominated by different types of elites. Iran is an example of a country primarily ruled by ideological/religious elites; Egypt is a country that has consistently been ruled by the military; Russia is an example of a country where the elites are heavily bureaucratic. The United States is the preeminent example of a country that is mainly ruled by wealth, so wealth and income are the main ways elite status is measured.

The starting point for the analysis in *Ages of Discord* is the database that was behind the pre-modern theories described in *War and Peace and War*, but many of the categories that were significant in pre-modern societies do not apply to the United States. That means Turchin had to go looking for other things to measure that would fit within the structural dynamic theory of secular cycles. Some of these are more persuasive than others. One of the primary measures of intra-elite competition is the number and cost of law degrees, medical degrees, and recently MBAs. These seem like decent proxies for how badly people want to break into the elite ranks, but I was somewhat surprised to see these standing nearly alone as proxies for the most important variable driving the secular cycle.

As another example, an increase in the measure of political violence during the current disintegrative phase is mostly based on classifying mass shootings as a type of political violence, even though the connection of these shootings to political motives is far from clear. Mass shootings have gone up substantially in the past 50 years, but without the mass shootings political violence would have stayed roughly the same or even gone down from the levels measured during the integrative period of 1930-1980. Including mass shootings as episodes of political violence is consistent with Turchin's overall thesis that a disintegrative phase of the secular cycle is characterized by generalized instability and not necessarily by purposeful political activity, but at the same time Turchin says that the general homicide rate does not correlate very well with other measures of instability. Classifying mass shootings as political violence rather than ordinary homicide is a judgment call, and illustrates that the devil is in the details of any attempt to quantify social science.

One example of a model that was of particular interest to me: the fifty-year fathers and sons cycle is based on the concept of successive generations having different predilections for violence. A common critique of theories based on generations is that people cannot be arbitrarily divided into discrete generational cohorts because people are born continuously. Turchin builds a social contagion model to show that you can have a cultural phenomenon oscillating at a generational rate even though individuals are entering and exiting continuously and cannot be divided into discrete cohorts. The point of the model is not to describe reality accurately – the model is far too simple for that. The point is to show that cultural waves on a generational scale are plausible, so we should not necessarily reject generational explanations for data. Turchin also notes that the fathers and sons cycle does not seem to apply in the same way to data from

China, but since *Ages of Discord* is about the United States Turchin does not follow up on that observation.

Assuming a fifty-year cycle exists, we are approaching the culmination of it. But as with the Civil War, an acute crisis does not guarantee that the trend will change and we will enter another integrative phase of peace and prosperity. Unless we change the fundamentals of labor demand and overproduction of elites, we'll be facing another 50 years of disintegration when the acute crisis is over.

Despite some quibbles, the overall patterns in Turchin's observations seem robust. There are recurring multi-decade periods in history when the incomes of wage-earners stagnate or go down while the incomes of elites go up, as described by the secular cycle theory. In the United States, these periods for wage earners correlate with large waves of immigration, so the fact that many wage-earners today focus on immigration as a problem is not entirely without basis.

Ages of Discord is a pretty good book, and I probably would have just reviewed *Ages of Discord* except for one problem – it kind of peters out at the end and doesn't really get into the details of our current mess. This makes sense since *Ages of Discord* was published before the 2016 election, so the full range of insanity had not yet emerged. Accordingly, I had to review *End Times*.

Figuring Out the Past: the 3,495 Vital Statistics that Explain World History (2020)

This book is only mentioned because I bought it for this review, but it is not particularly useful for any purpose I can discern. It does not explain world history. It has lists of data about arbitrarily chosen state level societies in a format that was apparently modeled after the *Pocket World in Figures* published by *The Economist*. It gives you a sketchy idea of the types of data that are included in Turchin's SESHAT database, but detailed information about the SESHAT database is available online for free.

End Times: Elites, Counter-Elites, and the Path of Political Disintegration (2023)

The first 189 pages of *End Times* are largely a rehash of the theories, data, and conclusions from Turchin's earlier work. Many of the historical anecdotes are familiar, but the material has been slimmed down, reorganized, and rewritten to focus on why Turchin believes that the United States is now approaching an acute crisis. My main complaint is that Turchin could have included more explanation of how he reached his conclusions without making the book too long or dense for a popular audience, and then I would not have felt the need to go back and read his other books before I could do this review. Turchin is good at providing text explanations for models and data, as demonstrated in his other books, but he doesn't always get the job done in *End Times*.

Perhaps the biggest innovation in *End Times* is Turchin's audacious proposal to collapse all the complexity and disputation associated with Marxism, capitalism, and socialism into one simple concept: the "wealth pump." The wealth pump is what happens at the stage in the secular cycle when the supply of wage earners is going up, wages are going down, and the elites are prospering due to low wages and high rents. As noted in *Ages of Discord*, societies can be governed by military elites, religious elites, bureaucratic elites, or plutocratic elites. Regardless of the type of society or the details of production and distribution, the elites eventually develop ways to skim too much from the productive economy. That is the wealth pump. When the wealth pump gets going then being elite is the only way to make a decent living, so everybody wants to be elite and you get elite overproduction. This leads to instability because frustrated elite aspirants are more effective troublemakers than immiserated peasants. When the frustrated elite aspirants start organizing the immiserated peasants, then you get an acute crisis.

After reviewing the secular cycle theory and recent American history along with comparative examples from other times and places, Turchin concludes that the cycles seem to apply to the United States, and that we are entering the terminal crisis part of a disintegrative phase right on schedule. "As a result of the center's collapse, ideological infighting is shifting from the struggle against the old regime (or in defense of it) to the struggle between different elite factions." *End Times* at 106. This seems to me like an important insight, because we hear a lot about the

extremists of the red team and the blue team these days, but that struggle is not yet fully formed. Instead, whoever is in power represents the de facto old regime and the opposition gets to pretend to represent change, but without much clarity as to what the change will be.

Turchin identifies Tucker Carlson and a few others as being dangerously close to developing a political program that would appear coherent to the red team political base. The potential political program includes:

· Opposing mass immigration, which Turchin believes is a legitimate concern for wage earners because mass immigration has historically suppressed wages.

· Opposing military interventions abroad.

· Defending free speech against attacks from both legacy parties.

Turchin does not identify anyone who is dangerously close to developing a unifying or coherent program for the blue team, perhaps because the blue team is currently stuck defending the old regime in the form of the Biden administration.

Interestingly, asabiya and the thousand-year asabiya cycle were the leading themes in *War and Peace and War*, but they are totally absent from *Ages of Discord* and *End Times*. I don't know whether this is because the thousand-year cycle is too long to be relevant in discussing U.S. history, or because the subject is too depressing. If humans only learn to cooperate on a large scale is by experiencing genocide, then there is not much we can do about our current situation except continue to bicker until things get genocidal and we can start generating asabiya again. Turchin is clearly trying to persuade Americans to break from the ancient pattern, or at least to use whatever asabiya they have to avoid disaster.

This brings us back to the premise of the review: I read *End Times* before I read Turchin's other books, and I found its explanations of Turchin's prior work to be a little skimpy, leaving me with more questions than answers. I'll conclude with a few questions that are likely to arise from reading *End Times* by itself, and try to

answer those questions so you can enjoy *End Times* more if you decide to read it.

Are Turchin's theories well supported?

When I first read *End Times*, I subjectively agreed with a lot of what Turchin was saying, but I wasn't too convinced that he had made big advances in data science to support his theories. For example, the concept of "elite overproduction" is based on an analogy between two wildly different phenomena: elite birth rates in medieval times and college education in the late twentieth century. I feel confident that a computer algorithm did not come up with this analogy. Turchin or one of his collaborators came up with the analogy and gave it the name "elite overproduction." Giving an analogy a name turns it into a category, and that makes it part of our reality (and part of the database). Putting all the different versions of elite overproduction into a single category and coming up with a catchy name for it is inherently more of a qualitative achievement than a quantitative process.

In the *End Times* appendices describing (very vaguely) how his model works, Turchin admits that knowledge of the past "needs to be translated into a form amenable to analysis with the tools of cliodynamics." *End Times* at 274. A cynic might suspect that translating data into "a form amenable to analysis" means subjectively pounding square pegs into round holes until they give you the answer your thesis demands, which is not much different than what historians have always done. But Turchin gives a somewhat persuasive account of how the work is actually done by a hierarchy of research assistants and experts. After reading *Ages of Discord* I am more convinced that Turchin's iterative approach to fitting proxies with variables is probably necessary to make progress. Nevertheless, the subjective aspects must be kept in mind when Turchin claims that his approach is wholly scientific, and that all prior theories and approaches are therefore inherently inferior.

In the end, it is likely that massaging the data is what yields the insights. The insights manifest themselves as categories amenable to analysis. The categories may also be amenable to incorporation into ideologies and political debates. If Turchin's work gives rise to an ideology that make more senses than what the red team and the blue team are currently saying, then maybe people will figure out ways to get the country back on an integrative, upward trend.

Is Turchin's theory too deterministic?

Any historical theory that contains a cyclical element is always accused of being too deterministic and giving too little credit to human agency. This review of *End Times* on the website of the American Institute of Economic Research says:

> Although Turchin does not appear to be a fan of Marx, his approach shares the Marxian problem of envisioning the sweep of history in a very mechanistic way. His human agents are materialistic and, like the rabbits and wolves, act in (obviously shortsighted) ways to maximize their take in the great tug-of-war for social resources between the classes. Human agency has little place in his theory. As he says, "The great-man theory is the most 'anti-cliodynamic' theory of history I can think of," (where "the great-man theory" is one that makes the agency of individuals pivotal to the flow of history).

This critique is a little strange, because I don't think that failing to attribute enough agency to "great men" has ever been a problem in any civilization we know about. The hot topic among social scientists for the last fifty years or so has been to remember that the little people have agency too. Figuring out how the collective agency of the little people works on a large scale is the problem Turchin is trying to solve.

Turchin addresses this directly in *War and Peace and War*. Turchin cites Tolstoy's call to develop a calculus to "integrate" and solve for how the wills and actions of everyone create history. The chaotic nature and sensitive dependencies in complex systems mean that small inputs by individuals can have big effects, but it is hard to predict exactly when or how. The overall trend of Turchin's books is to note troubling historical parallels, but to emphasize that we could choose differently today, especially in light of our advantages in productivity, technology, and communications.

Why not just use economic frameworks?

The same AIER review also says:

> What exactly do elites do, for example? Are they simply leeches on society, or do they serve some productive function? [followed by multiple additional rhetorical questions]
>
> As economists, we think Turchin fails to account for the moderating role of prices. In a market society, a surplus of elites should change the relative wages of elite versus non-elite jobs. Indeed, the federal government's persistent subsidization of college education has created a surplus of low-skill college graduates and a shortage of technical workers. The typical salary for a grievance studies graduate is a pittance of what an arc welder makes. Not surprisingly, many people are rationally forgoing college and opting, instead, for trade careers.

Turchin explains in *War and Peace and War* that neoclassical economics and rational choice theory can explain some things such as prices, but they simply do not explain where values come from and why they differ between individuals and social groups. In one time and place, hordes of people will volunteer to fight on the front lines of a bloody war, while in a different situation they will all run away. That is the type of problem Turchin is trying to get at, and it is not explained by prices.

More troubling is that these economists seem to have completely missed the point of *End Times*, which is that the most important variable leading to disintegration and crisis is overproduction of elites. Turchin very clearly understands and illustrates that when too many people go to college, the wages of college graduates are likely to go down. But the problem is not solved when wages for college graduates reach a market-clearing level. The college graduates are unhappy because they took out huge loans and did not get the elite jobs they expected, and they don't necessarily get a do over. They become frustrated elite aspirants. When the number of frustrated elite aspirants gets too high, history shows you got trouble, you got terrible terrible trouble, with a capital T and that rhymes with E and that stands for Elite Overproduction.

What about the war in Ukraine?

Turchin says in *End Times* that wars are particularly suited to quantitative modeling and prediction. I was therefore very disappointed when Turchin made no attempt to model or predict the outcome of the Ukraine war, which started a

year before *End Times* came out. Seems like low hanging fruit, a good test of the methodology.

Turchin explains in a series of posts on his blog beginning in July of 2023 that his final manuscript deadline was August 2022, so he did not have the time or the data to work up a model for the Ukraine war. Turchin explained that by 2023 Ukraine had become a war of attrition, and he compared two competing theories of who would win. Paul Krugman stood with the U.S. government, noting that the combined economic power of the Ukraine, the United States, and Europe, measured by GDP, was more than 20 times the economic power of Russia, and therefore Ukraine had the advantage. A bunch of bloggers on the internet took a contrary view based on availability of replacement soldiers and armaments. Turchin built a model and projected that the motley crew of bloggers was correct – Russia will win the Ukraine war. The basic problem with the economic model was that people, armaments, and dollars are not actually fungible in the real world.

What next?

You may have guessed that if Turchin made a specific prediction such as a civil war in the United States, I would have mentioned it by now. Turchin is pretty clear in *End Times* that the path of disintegration is predictable, but the end result is not. A group of researchers recently applied Turchin's methods to evaluate whether the outcomes of crises could be predicted. They concluded:

> Our analyses show that the consequences experienced by each crisis is highly variable. The outcomes themselves are uncorrelated with one another and, overall, the set of consequences is largely unpredictable when compared to other large-scale properties of society . . . . We conclude that there is no 'typical' societal crisis of the past, but crisis situations can take a variety of different directions.

The main thing you can predict for the United States right now is that disintegrative periods keep going until something happens to reverse the trend. That could be a civil war, a foreign war, or a plague that wipes out enough people to reset labor/elite dynamics. It could also be a political compromise that slows down the wealth pump enough to calm the masses.

Final Conclusions

1. Peter Turchin has not solved history (yet).

2. Turchin is worth listening to, regardless of whether his cycle theories turn out to be the ultimate key to understanding history. As Turchin points out in *Ages of Discord*, the measure of a theory's importance is whether it is productive, not whether is it ultimately correct. Isaac Newton is recognized as a great scientist because his theories of gravity and motion produced a lot of new knowledge, even though they turned out to be incorrect (or at least incomplete). I'm not sure if Turchin is on a level with Newton, but he's pretty good.

3. Turchin says the United States is in a crisis period after roughly 50 years of societal disintegration. His observation seems justified both by the work he has done and by just looking around. Turchin is as well qualified as anyone to say that the United States is entering a historically significant crisis period, that things will probably get worse before they get better, and to suggest what sorts of things will improve our collective long run prospects.

4. Turchin says It is up to this generation of Americans what to do about the present crisis. The choices we make will determine not only how bad the crisis gets, but also whether we are in for another 50 years of disintegration after the acute crisis is over. Turchin says the most important thing is to turn off the wealth pump. We can do or not do – there is no try.

Eothen by Alexander Kinglake

Eothen was first recommended to me as "a masterpiece of the wry and elliptically self-mocking English travel memoir," and I found it compulsively readable.

It's a true story in which our hero, Alexander Kinglake, visits famous sites throughout the Middle East, during a pandemic in the 1830s.

If you have a taste for dry English humor mixed with a bit of social commentary and adventure, you'll probably like it.

Our author's preface warns that the book "is quite superficial .... I have endeavoured to discard from it all valuable matter derived from the works of others, and it appears to me that my efforts in this direction have been attended with great success."

He goes on to assure us that his book is "thoroughly free" from any "moral reflections", "political disquisitions", or "useful statistics". Nor, he claims, does it contain any "religious knowledge", "details of geographical discovery, or antiquarian research." His intention is just to describe his experience of the journey, as if he were talking to a friend (and he had a particular friend in mind, to whom the preface is addressed).

He omits all of his European travels, skipping over the whole journey from his home in England across the continent to the Balkans, and begins more or less *in media res* with his passage into Belgrade, now the capital of Serbia, but then (1830s) a fortified city on the western edge of the Ottoman Empire.

He begins with gusto: "now my eyes would see the Splendour and Havoc of The East," then immediately turns to the omnipresent danger of the plague which hovered like a pestilent cloud in the background of his entire journey. This plague, caused by the bacterium *Yersinia pestis*, had been known as the Black Death when it devastated Europe in the 1300s. Kinglake describes the various quarantine restrictions with which the people of his time attempted to contain it.

> "If you dare to break the laws of the quarantine, you will be tried with military haste; the court will scream out your sentence to you from a tribunal some fifty yards off; the priest, instead of gently whispering to you the sweet hopes of religion, will console you at dueling distance, and after that you will find yourself carefully shot and carelessly buried".

After Kinglake and his companions ferry across the Danube river between Europe and the Ottoman lands, a group of Turkish porters wearing turbans, pistols and swords comes forth from Belgrade to help his party with their luggage. He speculates these men might "have thought themselves more usefully, more honourably, and more piously employed in cutting our throats than in carrying our portmanteaus."

He mentions an English manservant employed by his group who gazed upon these Turkish porters with considerable astonishment but then, gathering himself together, "marched on with the steps of a man - not frightened exactly, but sternly prepared for death, or the Koran, or even for plural wives."

An audience with the Pasha of Belgrade follows, who arranges for them a guide, horses, and servants for the journey to Istanbul.

Kinglake refers to the new guide as a "Tatar" as if that were a title rather than an ethnic term, which I found slightly puzzling. He specifies that a Tatar's job is to carry government dispatches throughout the realm, and also to accompany respected foreign travelers for their guidance and protection. This Tatar is apparently named Moostapha, and he takes command of the servants, who are known as "Suridgees." The Suridgees are “employed to lead the baggage-horses. They are most of them Gipsies. Their lot is a sad one: they are the last of the human race, and all the sins of their superiors (including the horses) can safely be visited on them.”

I suppose it's necessary to say something about the chasm of differences between Kinglake's era and ours in terms of respectable opinions about class, ethnicity, sex, race, religion - all of those titillating demographic distinctions that people get so worked up about. Where to begin?

How about a favorite quote from the British author C.S. Lewis, on trying not to fall victim to the unexamined prejudices of one's own era:

> "The only palliative is to keep the clean sea breeze of the centuries blowing through our minds, and this can be done only by reading old books. Not, of course, that there is any magic about the past. People were no cleverer then than they are now; they made as many mistakes as we. But not the same mistakes. They will not flatter us in the errors we are already committing; and their own errors, being now open and palpable, will not endanger us. Two heads are better than one, not

> because either is infallible, but because they are unlikely to go wrong in the same direction. To be sure, the books of the future would be just as good a corrective as the books of the past, but unfortunately we cannot get at them."

Eothen is from the era when Queen Victoria was ascending to the British throne, the Industrial Revolution was peaking, and practitioners of "Western culture" were finding that it drove their technological advantage over non-industrial cultures exponentially forward. The warlike, expansionist forces of Europe were gearing up for their most extreme phases, supported by their growing industrial infrastructure of steamships and rail.

European colonies were beginning to grow in Australia and New Zealand, Dutch settlers were fighting the Zulus and the British in South Africa, while in China the run-up to the Opium Wars was well underway.

In America, the Civil War and abolition of slavery were still decades in the future; the Trail of Tears was a current event. Just a few years before Kinglake began his journey, the French author Alexis de Tocqueville had been traveling through the expanding United States. Tocqueville's observations, published as *Democracy in America*, make an interesting point of comparison to Kinglake's contemporary experiences in a very different part of the world.

Obviously, there was no such thing as "wokeness" back then. At the global level, practically no human societies were even trying to be egalitarian or representatively democratic yet. Judgmental opinions about the relative

merits of other races, nationalities, or ethnic groups were considered normal. Even within one's own group, the hierarchical concept of one's "betters" and "inferiors" was a standard part of most people's mental furniture. Modern efforts to transcend these types of prejudice have been generally laudable, yet (so far, at least) less successful than one might hope. Rather than belabor this topic with speculative theories about why, let's continue with Kinglake on his journey and perhaps we'll at least gain some perspective.

As he and his companions prepare to leave Belgrade, their Tatar arrives fresh from the bath "for so is the custom of the Ottomans when they start upon a journey" and it seems like an excellent custom to me. Kinglake notes that the rigors of traveling hundreds of miles on horseback will have worn down this “sleek Moostapha” quite a bit before he "comforts his soul in the marble baths" at Istanbul.

> "At first our way was in darkness, but after a while the moon got up, and touched the glittering arms and tawny faces of our men with light so pale and mystic that the watchful Tatar felt bound to look out for Demons, and take proper means for keeping them off: forthwith he determined the the duty of frightening away our ghostly enemies (like every other troublesome work) should fall upon the poor Suridgees; they accordingly lifted up their voices, and burst upon the dreaded stillness of the forest with shrieks and dismal howls. These precautions were kept up incessantly, and were followed by the most complete success, for not one demon came near us."

They spend a night in a small Serbian village, consisting of about “a dozen clay huts” in a clearing in the forest. He notes that the villagers “were careful to conceal their riches, as well as their wives,” but after some threats from Moostapha they provided the party with milk and eggs for dinner.

They did not encounter any brigands along the way, unless you count the skeletons of some robbers who had been impaled on high poles.

Arriving at Istanbul rather the worse for wear, they hunker down to keep a low profile for a time, as they are worried about both the plague and the plague regulations.

He discusses the various and conflicting attitudes and ideas about the plague which were then current, which seem uncomfortably relevant in the wake of our recent modern pandemic.

> "It is the firm faith of almost all the Europeans living in the East, that plague is conveyed by the touch of infected substances, and that the deadly atoms especially lurk in all kinds of clothes and furs".

This, of course, led many Europeans to support the Ottoman quarantine restrictions and avoid contact with other people, or other people’s clothes. The average Muslim, however - and more than a few Europeans - often took a more stoic or fatalistic approach, and exhibited little respect for such precautions.

While exploring the city, Kinglake gets bumped by the foot of a plague victim being carried to a hasty funeral, and frankly admits:

> “This accident gave me such a strong interest in denying the soundness of the contagion theory that I did in fact deny and repudiate it altogether: and from that time, acting upon my own convenient view of the matter, I went wherever I chose, without taking any serious pains to avoid a touch. It seems to me now very likely that the Europeans are right, and that the plague may be really conveyed by contagion; but during the whole time of my remaining in the East my views on this subject more nearly approached to those of the fatalists”

A paper by the late Professor LaVerne Kuhnke confirms that, in 1834, there was a "prolonged and devastating plague epidemic which provoked a heated controversy over the etiology of the disease which was not settled until 60 years later, when Yersin discovered the specific causative pathogen in 1894."

> Kuhnke also notes: "Opposition to quarantine practices among Europeans had a wide range of motivations. Many reformers' reactions against the archaic, unexamined and sometimes illogical regulations were well-founded and sincere.... Many enlightened Physicians had rejected the so-called 'contagionist' hypothesis on which quarantine practices were based. And many trade representatives resented the restrictions simply as interference with private enterprise."

Speaking of private enterprise, Kinglake spares a page or so to explain why it’s customary, in a Turkish bazaar, to haggle over prices in a way that his fellow countrymen would find distasteful and unseemly:

> "In England, or in any other great mercantile country, the bulk of the things bought and sold goes through the hands of a wholesale dealer, and it is he who higgles and bargains with an entire nation of purchasers by entering into treaty with retail sellers. The labour of making a few large contracts is sufficient to give a clue for finding the fair market value of the goods sold throughout the country; but in Turkey ... partly from the absence of great capital and great credit, the importing merchant, the warehouseman, the wholesale dealer, the retail dealer, and the shopman, are all one person."
>
> "He cannot know the intensity of the demand, or the abundance of the supply, otherwise than by the offers which may be made for his little bundle of goods; so he begins by asking a perfectly hopeless price, and then descends the ladder until he meets a purchaser".

Kinglake also mentions his efforts to learn some Turkish, describing it as a tongue "enriched, perhaps overladen, with Persian and Arabic words imported into the language, chiefly for the purpose of representing sentiments, and religious dogmas and terms of art and luxury" for which the ancestral language, originating among the “untamed millions who rove over the plains of Northern Asia,” would have had no need for words.

In that place and time, every man was his own lawyer: there was no generally accepted role for legal counsel. As a result, Kinglake asserts, most speakers of Turkish took some pains to speak eloquently since, in a legal context, “a bad speech may endanger the property of the speaker as well as the soles of his feet, and the free enjoyment of his throat.”

The bastinado - flogging of the soles of the feet - was a standard punishment in the Ottoman Empire, and its results are described later in the book when some scoundrels suspected of stealing Kinglake's camel are brought into court.

> "I was shocked when they entered, for I was not prepared to see them come carried into the room upon the shoulders of others. It had not occurred to me that their battered feet would be too sore to bear the contact of the floor. They persisted in asserting their innocence. The Governor wanted to recur to the torture, but that I prevented, and the men were lifted back to their dungeon."
>
> "Thinking at last that nothing was to be gained by keeping the prisoners any longer in confinement, I requested that they might be set free. To this the Governor assented, though only, as he said, out of favor to me, for he had a strong impression that the men were guilty."

From Istanbul, they head south to visit the sites on the west coast of Turkey where the Trojans lived during the legendary Trojan War. Kinglake is especially happy about this part of the trip and waxes rhapsodic on how he read and re-read Homer's *Iliad* as a young boy (in Alexander Pope's famous translation) which he enjoyed greatly as an adventure story. He thanks and praises his mother for encouraging his younger self in these two things: "to find a home in his saddle, and to love old Homer, and all that Homer sung."

From the land of the *Iliad*, they travel south along the Turkish coast to the city of Smyrna (modern Izmir) where they embark on a Greek brigantine and set sail for the coast of Syria. Due to inclement weather, they put in at

the island of Cyprus, and their party disembarks there, having enjoyed about as much as they could stand of Mediterranean sailing.

Kinglake admits, with a touch of embarrassment, to entertaining some mystical feelings about visiting the ruins of a pagan shrine to Aphrodite at Paphos, on the south shore of Cyprus. This visit, however, does not inspire him. He pokes around, feels a bit silly, and notes "If you have no taste for research, and can't affect to look for inscriptions, there is some awkwardness in coming to the end of a merely sentimental pilgrimage, when the feeling which impelled you has gone".

He sails away from Cyprus to the mainland of western Asia, arriving at Beirut (which he spells "Beyrout") on the eastern shore of the Mediterranean Sea.

At Beirut, he learned that the quasi-legendary Lady Hester Stanhope lived about one day's journey away. She had gained a reputation over the preceding decades as an English expatriate noblewoman who had taken up adventuring and archaeology in Western Asia, and reputedly now reigned as a "Queen of the Desert" over some wandering Arab tribes. A mysterious and imperious figure, she did not normally receive European visitors. Fortuitously, she had known Kinglake's mother as a girl, so he sent a courier to inform her that he was in the area, and received a rare invitation to visit.

Hiring some horses, he and his group ventured forth to her stronghold in the desert, a former monastery which resembled a "neglected fortress".

After dinner - "The cuisine was of the Oriental kind, -- highly artificial, and, as I thought, very good" - he is personally escorted into the room where the Lady Stanhope received visitors.

> "her face was of the most astonishing whiteness; she wore a very large turban made seemingly of pale cashmere shawls, and so disposed as to conceal the hair; her dress ... was a mass of white linen loosely folding -- an ecclesiastical sort of affair".
>
> "The prestige created by the rumours of her high and undefined rank, as well as of her wealth and corresponding magnificence, was well sustained by her imperious character and her dauntless bravery ... I never heard anything satisfactory as to the real extent or duration of her sway, but I understood that, for a time at least, she certainly exercised something like sovereignty amongst the wandering tribes."

Her interests had lately become more spiritual, and as they sat up far into the night, smoking the Turkish pipes known as "chibouks" or "tchibouques," she began to discourse on mysteries sacred and profane, such as:

> "announcing that the Messiah was yet to come. She strived to impress me with the vanity and falseness of all European creeds, as well as with a sense of her own spiritual greatness. Throughout her conversation upon these high topics, she carefully insinuated, without actually asserting, her heavenly rank".
>
> "The Prophetess announced to me that we were upon the eve of a stupendous convulsion which would destroy the then recognised

> value of all property upon earth; and, declaring that those only who should be in the East at the time of the great change could hope for greatness in the new life that was then close at hand, she advised me, whilst there was yet time, to dispose of my property in poor, frail England, and gain a station in Asia."
>
> "She spoke with great contempt of the frivolity and benighted ignorance of the modern Europeans; and mentioned, in proof of this, that they were not only untaught in astrology, but were unacquainted with the common and every-day phenomena produced by magic art: she spoke as if she would make me understand that all sorcerous spells were completely at her command, but that the exercise of such powers would be derogatory to her high rank in the heavenly kingdom."

After summing up the rest of his stay, Kinglake makes a few incisive observations on matters of belief:

> "As for the Lady's faith in Astrology and Magic science, you are not for a moment to suppose that this implied any aberration of intellect. She believed these things in common with those around her".

He observes how, in his experience, even a hard-headed, practical type of man will often, eventually, yield "to the faith of those around him; and this he will do by sympathy, it would seem, rather than from conviction."

> "in England we scarcely acknowledge to ourselves how much we owe to the wise and watchful press which presides over the formation of our opinions, and which brings about this splendid result, namely,

> that in matters of belief the humblest of us are lifted up to the level of the most sagacious, so that really a simple [junior officer] is no more likely to entertain a foolish belief about ghosts, or witchcraft, or any other supernatural topic, than the Lord High Chancellor".

There's some relevance in this line of thought to our own era. If we once did, we sadly no longer have any generally acknowledged "wise and watchful press" to ensure that the least among us are lifted to the level of the most sagacious. On the contrary, the least sagacious among us are now the most gullible adherents of news-and-opinion-mongers who only cater to their prejudices, encourage belief in all manner of superstitious and inaccurate nonsense, and whip up the most predictable emotions with clickbait.

On the other hand, it's telling that Kinglake illustrates his point using the example of a junior military officer: his specific phrase is "so that really a simple Cornet in the Blues is no more likely," which is (not a reference to playing blues music on a brass horn, but rather) an old name for a second lieutenant in the British Army's Blues and Royals cavalry regiment. So if a junior cavalry officer is considered "the humblest of us," it becomes clear that by "us" he means the more respectable classes of Great Britain. Perhaps the effect of a "wise and watchful press" was less reliably uplifting to the sagacity of the cannon fodder.

Nazareth is the next famous location to which Kinglake travels and he admits, again with a touch of embarrassment, to entertaining some mystical feelings about visiting the Grotto of the Annunciation, a holy site maintained by the Catholic church, which is sacred to Mary, the mother of

Jesus Christ. He enjoys at least a moment or two of rapturous religious experience here, as compared to his visit to Aphrodite's pagan shrine on Cyprus, but still mentions some conflicted and disenchanted feelings:

> "let there but come one chilling breath of the outer world, and all this loving piety would cower, and fly before the sound of my own bitter laugh."
>
> "One moment -- one more, and then -- the fever had left me. I rose from my knees. I felt hopelessly sane. The mere world reappeared."

Aside from his interest in Aphrodite, the Virgin Mary, Lady Hester Stanhope, and his praise of his mother's views on Homer and horsemanship, Kinglake evinces a noteworthy level of interest on the topic of women generally. Unlike some male authors of his era, he is not the type to ignore women and women's issues as unworthy of discussion. It is clear he holds the 'fair sex' in high esteem, though he has a keen and cynical eye for pretension in men *or* women.

Throughout the book, he maintains a running commentary on the relative charms of the various types of local women he encounters in his travels. He was still in his 20s when he undertook this journey, and some of his remarks reminded me of the Beach Boys' song "California Girls," which extols the virtues of American girls from the East coast, the South, the Midwest, and the North, only to wish that all of them could join the "cutest girls in the world" in California.

These passages very much sound like he's writing to a personal friend, as he shifts reliably from first- to second-person narration.

In Istanbul: "perhaps as you make your difficult way through a steep and narrow alley ... you meet one of those coffin-shaped bundles of white linen that implies an Ottoman lady. Painfully struggling against the obstacles to progression interposed by the many folds of her clumsy drapery ... she works her way on full awkwardly enough, but yet there is something of womanly consciousness in the very labour and effort with which she tugs and lifts the burden of her charms".

"There is fire, though, too -- high courage, and fire enough in the untamed mind, or spirit, or whatever it is which drives the breath of pride through those scarcely parted lips.

You smile at pretty women -- you turn pale before the beauty that is great enough to have dominion over you. She sees, and exults in your giddiness; she sees and smiles".

In Smyrna: "you see ... the large eyes deeply set, and self-relying as the eyes of a conqueror, with all their rich shadows of thought lying darkly around them, -- you see the thin fiery nostril, and the bold line of the chin and throat disclosing all the fierceness, and all the pride, passion, and power that can live along with the rare womanly beauty of those sweetly turned lips."

In Cyprus, sacred to Aphrodite: "The bewitching power attributed at this day to the women of Cyprus is curious in connection with the worship of the sweet goddess who called their isle her own. The Cypriot ... is tall, and slightly formed; there is a high-souled meaning and expression -- a seeming consciousness of gentle empire that

> speaks in the wavy lines of the shoulder and winds itself ... around the slender waist".

In Bethlehem, where a predominantly Christian population allowed the local young ladies greater freedom than they would have enjoyed under a more strictly Muslim regime, "those romping girls of Bethlehem will gladden your very soul".

> "if you will only look virtuous enough to prevent alarm, and vicious enough to avoid looking silly, the blithe maidens will draw nearer and nearer to you".

A wise recommendation, which could double as dating advice for a young man.

Whatever his interested yet ambiguous feelings about religion might be, it's clear enough where Kinglake's genuine enthusiasms lie when he wraps up his account of the holy city of Bethlehem by calling it a "gushing spring of fresh and joyous girlhood."

He also enjoys a visit to Damascus, though he doesn't mention the ladies there. This ancient city is, in our day, the capital of Syria; during Kinglake's time it was part of Palestine. He passed through on his way to Egypt, and again on his return. Alcohol is forbidden to Muslims, but during this first visit he stayed with the local Franciscan (Catholic Christian) monks, and warmly recommends their viticultural acumen:

> "Christianity merits and sanctions the drinking of wine; and of all the holy brethren in Palestine there are none who hold fast to this

> gladsome rite so strenuously as the monks of Damascus; not that they are more zealous Christians than the rest of their fellows in the Holy Land, but that they have better wine."

From Damascus, he ventures down to the western shore of the Sea of Galilee, to the city of Tiberias. Tiberias, despite being founded by Romans and named after one of their emperors, had (sometime in the 16th century) been anointed one of the Four Holy Cities of Judaism, and thus had become a pilgrimage site for Jews of all nations. Various Christian holy sites are also pointed out to him along the way, including the remains of some famous loaves and fishes which had been miraculously turned to stone - he notes drily that "The petrifaction was most complete."

One of the drawbacks of visiting famous pilgrimage sites becomes unpleasantly clear when he stays overnight in Tiberias: pilgrims from everywhere bring pests from everywhere. "The fleas of all nations were there … and all rejoiced in one great international feast."

After a poor night's flea-bitten sleep, he sets out toward the Dead Sea.

He begins the next chapter by caricaturing - and ascribing to his former self - the typical rebellious and self-important tendencies of a certain cynical-emo-outsiderish type of 'angry young man.' This persona appears to be a recurring archetype, or possibly a developmental stage:

> "There comes to him a time for loathing the wearisome ways of society — a time for not liking tamed people — a time for not sitting in pews — a time for impugning the foregone opinions of men, and haughtily dividing truth from falsehood — a time, in short, for

> questioning, scoffing, and railing — for speaking lightly of … all our most cherished institutions. It is from nineteen to two- or three-and-twenty, perhaps, that this war of the man against men is like to be waged most sullenly."

This may be the key to his whole journey: he brings it up at this point to explain his questionable decision to follow a questionable guide to the wrong side of the Jordan River. Even though he knows they should be sticking to the West Bank as they journey south toward the Dead Sea, he allows his party to be led across to the east bank of the Jordan. He explains that the chance to encounter actual "wandering tribes," and maybe partake of "bread and salt in the tent of an Arab warrior" was part of the appeal.

> "There, on the other side of the river … there reigns the people that will be like to put you to death, for *not* being a vagrant, for *not* being a robber, for *not* being armed and houseless. There is comfort in that -- health, comfort, and strength to one who is aching from very weariness of that poor, dear, middle-aged, deserving, accomplished, pedantic, and pains-taking governess, Europe."

They eventually find their way down to the Dead Sea, where Kinglake takes a dip and finds the water so excessively salty and buoyant that he can't even swim properly.

Not having found any spot where they can ford the Jordan on the way down, they begin retracing their steps back north in hopes of regaining the relative safety of the West Bank before they completely run out of provisions.

On the way, they encounter a hardscrabble group of locals, living in "low black tents," who receive Kinglake's visit cordially enough, according to their customs, and offer him some goat buttermilk, for which he is grateful.

> "they did not offer me the bread and salt (the pledges of peace amongst wandering tribes) ... I afterwards found that the poor fellows had no bread to offer ... they had a scanty supply of milk from goats, but they were living almost entirely upon certain grass stems which were just in season at that time of the year. These, if not highly nourishing, are pleasant enough to the taste, and their acid juices come gratefully to thirsty lips."

Seventeen able-bodied men of this group, along with some elders, agree to help Kinglake's party across the river. However, once they reach it, some of them begin to argue with their fellows in favor of robbing the travelers, rather than assisting them.

> "they disputed with great vehemence and fury for nearly two hours"

> "During the discussion I remained lying in front of my baggage ... the pleasantest toys to play with during this interval were my pistols, and now and then, when I listlessly visited my loaded barrels with the swivel ramrods, or drew a sweet musical click from my English firelocks, it seemed to me that I exercised a slight and gentle influence on the debate."

Eventually, the translator gets a word in edgewise, and proposes that Kinglake write out for the locals a "*teskeri*, or written certificate of their good conduct, as might avail them hereafter in the hour of their direst

need," along with some *baksheesh* (money given as a tip or bribe). They eagerly accept this offer, seeming to value the teskeri over the baksheesh, and help Kinglake's party ford the river with the aid of several empty wineskins which they repurpose as balloon-like flotation devices.

The world-famous city of Jerusalem is up next, where Kinglake observes and describes crowds of Christian pilgrims, both Orthodox and Catholic, conducting sundry religious exercises in preparation for Easter. He feels no particular religious inspiration himself, but his translator Dthemetri is a (perhaps overly) zealous member of the Greek church, and drags him along through a superabundance of shrines and icons, performing many devotions.

> “He was almost distracted by the temptations that surrounded him: there were so many stones absolutely requiring to be kissed, that he rushed about happily puzzled, and sweetly teazed, like ‘Jack among the maidens.’”

Kinglake also happens to observe the perfunctory funeral of a poor, elderly Greek pilgrim who had expired upon reaching the Holy Land. His burial service was being rushed through indifferently by a fat local priest.

> "I did not say 'Alas!' - (nobody ever does that I know of, though the word is so frequently written). I thought the old man had got rather well out of the scrape of being alive and poor."

From Jerusalem, they travel to Gaza (between quarantines and Gaza, this book strikes some oddly contemporary notes for a narrative that’s 180 years

old.) There they rent camels and prepare for the next leg of their journey, across the desert to Egypt.

Dthemetri the translator was also the ‘travel coordinator’ for this part of the trip.

> As such, "he found it necessary to put himself in communication with the Governor. The result of this diplomatic intercourse was that the Governor with his train of attendants came to me one day … and formally complained that Dthemetri had grossly insulted him."

Kinglake is shocked and, as Dthemetri is present, immediately asks him "what the deuce he meant by it," expecting a denial or excuse.

> “to my surprise he very plainly answered that he certainly *had* insulted the Governor, and that rather grossly, but, he said, it was quite necessary to do this in order to ‘strike terror and inspire respect.’”
>
> And indeed, this tactic apparently worked: the Governor of Gaza "seemed more than ever, and more anxiously, disposed to overwhelm me with assurances of good will and proffers of his best services."

This turns out to be a general principle, a theme to which Kinglake returns with several other examples: “one of the greatest drawbacks to the pleasure of traveling in Asia is the being obliged more or less to make your way by bullying.”

Educated at Eton and Trinity College, Kinglake is comfortable in his own status as an English gentleman and, though he shows a clear interest in learning about the customs of other peoples, has no qualms at all about judging them, sometimes condescendingly. He seems disappointed, and slightly disgusted, when the local traditions frustrate his inclination toward "fair play."

Hiring the assistance of some local Bedouins, they head for Cairo, which means traveling across the desert of the northern Sinai Peninsula for eight days on camel-back.

He goes into some detail on how to ride a camel:

> "your quilt or carpet ... is folded and fastened on to the pack-saddle upon the top of the hump, and on this you ride, or rather sit. You sit as a man sits on a chair when he sits astride. I made an improvement on this plan: I had my English stirrups strapped on to the cross-bars of the pack-saddle; and thus, by gaining rest for my dangling legs, and gaining, too, the power of varying my position more easily ... I added very much to my comfort."

The Bedouins with whom he traveled were fond of "youart" (yogurt) - "a kind of whey, which is the principal delicacy to be found amongst the wandering tribes."

They stop at an oasis where a caravan is encamped, and Kinglake mentions that the local people normally do not venture across the desert until they have enough parties interested in making the trip to form a proper caravan, for protection. They think it suspicious and strange that British travelers

are willing to undertake such a trek with only a few servants, a local guide, and a couple of pistols. There are even widespread rumors that the English travel under the protection of demons.

Kinglake attributes this belief "partly to the strong wilfulness of the English Gentleman (a quality which, not being backed by any visible authority either civil or military, seems perfectly superhuman ...), but partly too to the magic of the Banking system, by force of which the wealthy traveller will make all his journeys without carrying a handful of coin, and yet, when he arrives at a city, will rain down showers of gold."

I've found from my own experience that if you look like you might be more trouble than you're worth - “vicious enough to avoid looking silly” - yet act polite, you may be able to pass unscathed through places other folks might find hostile or treacherous. In 'strange lands,' the implicit intimidation of one's mere alien presence (which tends to evoke the fear of the unknown) together with a basic acknowledgement of etiquette (which gives the locals an opportunity to be courteous without losing face), is often sufficient to provoke a certain level of deference, or at least diffidence.

Kinglake’s party continues on through the desert, without seeing anyone else for days, but eventually they happen to cross paths with another Englishman who is headed in the opposite direction, accompanied by one servant and two local guides. In quintessentially British fashion "we lifted our hands to our caps, and waved our arms in courtesy" and kept going "as distantly as if we had passed in Pall Mall." Their attendants are more sociable, however, and begin talking, which causes the camels to stop. So Kinglake and the other British gentleman - a military officer heading home

from India - resign themselves to turning their camels around and exchanging some pleasantries.

> "I thought him manly and intelligent -- a worthy one of the few thousand strong Englishmen to whom the Empire of India is committed."

When at last they reach Cairo, they find it sadly besieged with the plague. Kinglake finds it easy enough to rent rooms, as nearly all other European travelers have fled the city. The man who rents him rooms later dies of the plague.

Kinglake and his companions remain in Cairo for nineteen days; they would have stayed for fewer, if not for the difficulty of procuring camels for the return trip.

He visits a banker, to present a certain document and receive cash, according to the banking system of those days, and is taken aback to discover the banker has quarantined himself behind a fence of iron bars, and receives the banking document with a pair of tongs to purify it with smoke before touching it. The banker later dies of plague.

He hires a donkey to ride around on, and a boy to lead the donkey and shout at pedestrians to get out of its way, and travels fairly comfortably around Cairo this way, though he has to hire a second donkey boy when the first one dies of the plague.

Among other sights, he comes across a slave market where "about fifty" black and brown girls were "exposed for sale." The white women available

for sale fetched a higher price and, he learns, were sequestered in private rooms nearby. Distasteful as such scenes are, it's important to remember that Kinglake was writing when slavery was still legal in most nations, including the US, and had only very recently (1833) been abolished throughout the British Empire.

He hires a local magician of some repute, not really expecting to see any genuine magic but hoping to see something interesting. The magician doesn't even manage a convincing show, so Kinglake, curious "to see what sort of mummery my Magician would practise if I called upon him to show me some performances of a higher order than those already attempted," contracts with him to "descend with me into the tombs near the Pyramids, and there evoke the Devil."

After some negotiation through the translator "it was arranged that, after a few days to be allowed for preparation, the Wizard should raise the Devil for two pounds ten." Lamentably, before he has a chance to summon the Devil amidst the tombs by the Pyramids, the magician dies of the plague.

> "In Cairo this custom prevails: -- at the instant of a man's death (if his property is sufficient to justify the expense) professional howlers are employed. I believe that these persons are brought near to the dying man, when his end appears to be approaching, and the moment that life is gone, they lift up their voices, and send forth a loud wail from the chamber of Death. Thus I knew when my near neighbours died.... Once I was awakened in the night by the wail of death in the next house, and another time by a like howl from the house opposite; and

> there were two or three minutes, I recollect, during which the howl seemed to be actually *running* along the street."

At this point, Kinglake develops a sore throat, and casts about for a doctor to prescribe him something. Most European doctors have already fled the city, but he learns of a young practitioner from Bologna who is still available. He visits the doctor, receives a prescription, and two days later learns that the young Bolognese physician has died of the plague.

Professor Kuhnke confirms that this outbreak "was one of the worst in Egypt's modern history ... at least 75,000 people died in Cairo alone, and perhaps 200,000 in all Egypt."

Kinglake, observing that "my banker, my doctor, my landlord, and my magician, all died of the plague" leaves Cairo as soon as some camels become available, and is glad to breathe the “free, wholesome air of the desert” again.

He does visit the nearby pyramids and Sphinx before leaving Egypt. His reaction to the pyramids is unusual - I was surprised when he described them in terms of an odd nighttime childhood experience I'd almost forgotten.

Apologetically, he begins: "try to endure this homely, sick-nursish illustration of the effect produced upon one's mind by the mere vastness of the great Pyramid." He describes how, when he was around four years old, he was

> "often in time of night the victim of a strange kind of mental oppression. I lay in my bed perfectly conscious, and with open eyes, but without power to speak, or to move, and all the while my brain was oppressed to distraction by the presence of a single and abstract idea, - the idea of solid Immensity.
>
> …my aching mind was fixed and riveted down upon the mere quality of vastness, vastness, vastness…
>
> …there was nothing at all abstract about the great Pyramid, - it was a big triangle, sufficiently concrete, easy to see, and rough to the touch; it could not, of course, affect me with the peculiar sensation I have been talking of, but yet there was something akin to that old night-mare agony in the terrible completeness with which a mere mass of masonry could fill and load my mind.
>
> And Time too; the remoteness of its origin, no less than the enormity of its proportions, screens an Egyptian Pyramid from the easy and familiar contact of our modern minds"

Compared to Kinglake's night terrors, my half-remembered childhood experience was more like a disquieting combination of mesmerism and vertigo on the edge of sleep, as if I were experiencing Immensity as a queasy sort of kinesthetic stimulus. I lumped it into the same category as hypnagogic jerks (starting awake as you doze off, usually because you feel like you're falling). It went away as I grew up, so I haven't thought about that feeling in years, but Kinglake's description gave my memory a jolt: an echo of that old disorienting visceral response to an abstract idea

resurfaced, with the thought "Oh yeah - that's a thing!" According to him, it's a thing which the Egyptian pyramids evoke, as they are large enough - and ancient enough - to impress upon one's mind the fearful notion of pure Immensity itself.

Also, he's a little bit in love with the Sphinx.

Although he only devotes two pages to her, he sets them off as a separate chapter. Describing her “big pouting lips” and “sad earnest eyes” as “beautiful in the fashion of the elder world” he notes that there are still fascinating Egyptian girls who resemble her.

On his way back to the Levant, through Suez and the Red Sea, Kinglake spends some effort trying to determine where Moses and the Israelites might have crossed, back in the Old Testament days when they were fleeing Egypt with the assistance of their Red-Sea-parting deity. His investigations prove inconclusive.

In general, Kinglake seems to regard the various ethnic and religious types he encounters from a ‘Natural History’ point of view, describing them almost as one might describe different varieties of wild parrot.

To his credit, he displays no personal animosity toward any particular group, though he does seem to find it unremarkable that some of the lower classes and certain ethnic groups (such as Jews, Romani, and people from Africa) suffer prejudice and mistreatment.

He is not squeamish about reporting the various types of prejudice and discrimination he comes across during his travels, in a way which modern readers may find surprisingly non-judgmental.

He discusses a few occasions where he encountered unfair situations and did what he could to make them less unfair, while regretting his inability to fully rectify them.

For example, on this return trip, he comments on the need to obtain milk, eggs, and bread from the locals:

> "The worst of it was that the needful viands were not to be obtained by coin, but only by intimidation. I at first tried the usual agent — money … but [my servant] came back empty-handed. I sent him again, but this time he held different language: he required to see the elders of the place, and, threatening dreadful vengeance, commanded them … that my tent should be immediately and abundantly supplied. He was obeyed at once … the usage of the East in old times, required the people of the village at their own cost to supply the wants of travelers; and the ancient custom is now adhered to — not in favor of travelers generally — but in favor of those who are deemed sufficiently powerful to enforce its observance"

Further north (toward the northernmost point of what is now Israel) he comes to the city of Safed, another of the Four Holy Cities which were particularly esteemed by the Jews of Kinglake's day. Ironically, it features in Eothen as a city where the local Jews were persecuted by an especially self-interested "prophet."

While pausing to camp outside of Safed, our author is visited by a delegation of Jewish elders, who beseech his help (as a presumably powerful grandee from England) and inform him that last year "a highly religious Mussulman called Mohammed Damoor went forth into the market-place, crying with a loud voice, and prophesying that on the fifteenth of the following June the true Believers would rise up in just wrath against the Jews, and despoil them of their gold, and their silver, and their jewels."

> "When that day dawned, the whole Mussulman population of the place assembled in the streets, that they might see the result of the prophecy. Suddenly Mohammed Damoor rushed furious into the crowd, and the fierce shout of the prophet soon ensured the fulfilment of his prophecy."

So much for self-fulfilling prophecies: Mohammed Damoor may be the first explicitly recorded instance of a self-fulfilling prophet.

The Jewish elders had come to Kinglake, hoping for assistance, because "Mohammed Damoor had again gone forth into the market-place, and lifted up his voice, and prophesied a second spoliation of the Israelites."

Kinglake notes, acidly: "This was grave matter; the words of such a practical and clear-sighted prophet as Mohammed Damoor were not to be despised."

He proposes to help them by making a formal application to the Governor for the arrest of Mohammed Damoor, which he guesses would probably help. At first, his visitors are pleased and thankful, but after thinking it over

for a moment they decide that such a course of action would likely anger the entire local Muslim populace, and probably cause another "massacre and robbery of the Israelites."

> "I myself did not think that this would be the case, but I could not of course force my aid upon the people against their will"
>
> "They were unable to suggest any mode in which I could aid them, except, indeed, by mentioning their grievances to the Consul-General at Damascus. This I promised to do, and this I did."

Besides that small favor, when Kinglake returns to the ancient city where he'd enjoyed the wine of the Damascene Franciscans, he presents a broader overview of the town. Focusing on the lush gardens which abound throughout Damascus, he likens them to the old overgrown forests of his English home, in terms of their casual disarray.

> "high above your head, and on every side all down to the ground, the thicket is hemmed in, and choked up by the interlacing boughs that droop with the weight of roses, and load the slow air with their damask breath."

As he skipped over his journey through Europe at the beginning, so he skips over his journey back home at the end: *Eothen*'s final pages recount a story about violating the quarantine restrictions at Satalieh (now Antalya, on the southern Turkish coast) which is, by turns, horrifying and hilarious.

So anyway, things have changed a bit since the 1830s, though not as much as one might have hoped, and not always for the better.

Let us persevere in hopes that, if we can combine a mindfulness of the past acquired by reading old books with a genial tolerance born of travel, that the future may actually prove appreciably superior to what's come before.

I've quoted Kinglake's words liberally in this review, but if I quoted every funny bit my review would simply become an abridged version of the book. *Eothen* runs to 300-some pages, and maintained my rapt attention throughout.

The man only wrote one other book: an eight-volume (!) history of the Crimean War, which sounds unpromising at best. But Kinglake is such an interesting and entertaining writer that I'm actually thinking of looking into it.

One last quote, from near the end of his long journey: he describes catching a glimpse of the Mediterranean as he rides westward through a mountain pass, and reflects that he had grown used to:

> "the people and the scenes of forlorn Asia - well used to tombs and ruins, to silent cities and deserted plains, to tranquil men, and women sadly veiled; and now that I saw the even plain of the sea, I leapt with an easy leap to its yonder shores, and saw all the kingdoms of the West in that fair path that could lead me from out of this silent land straight on into shrill Marseilles, or round by the pillars of Hercules, to the crash and roar of London. ... Behind me I left an old and decrepit World - Religions dead and dying - calm tyrannies expiring

in silence - women hushed, and swathed, and turned into waxen dolls ... Before me there waited glad bustle and strife ... wheels going - steam buzzing - a mortal race, and a slashing pace, and the Devil taking the hindmost".

Eve: How the Female Body Drove 200 Million Years of Human Evolution, by Cat Bohannon

A feminist take on evolutionary history might be a bit of a hard sell for ACX readers, it certainly doesn't help that it made me read the word *mansplain* two chapters in. But Cat Bohannon's ***Eve: How the Female Body Drove 200 Million Years of Human Evolution*** is an interesting enough book to be well worth enduring a few culture war flashbacks.

As the title would suggest *Eve* is an exploration of human evolution through the lens of the female body. Which in retrospect seems like the obvious way to look at evolution, given that it's where 99% of the whole reproduction business seems to be going on. The book structures itself as a journey through time, with each chapter focusing on the history of a particular evolutionary trait and it's associated female ancestor, or "Eves" as the book likes to call them. These range from the first mammal to produce milk up to modern *homo sapiens*. Although really *Eve* is anything but linear. One minute we're talking about breastfeeding rodents, then wet nursing in ancient Babylon, the next we're reading about Hillary Clinton and howler monkeys. It's an evolutionary journey, yes, but one with flashbacks and flashforwards and more than a few diversions along the way. Here's a far from an exhaustive list of interesting things I learned along the way:

1) Breasts are A Communication Platform

I was vaguely aware that breastfeeding played a role in building a babies immune system before reading *Eve* and that breasts were a bit more than just milk dispensation nozzles. But it's even more complicated than that. Think of breasts as more of an elaborate baby-to-mother docking port where biological information flows both ways. The baby is getting hormonal signals from the mother that convey her current stress level, which in turn shapes the babies behavior. Rats, mice and monkeys fed on milk low in stress hormones are playful and adventurous while those fed on high-stress milk are skittish and antisocial.

But the baby's backwashed saliva also informs the mother what sort of milk they need. A mother's breast milk will change composition to fight off infections, adjust nutritional needs or work as an analgesic for a baby in pain.

2) Wombs are Weirder than you Think

You probably know that the human reproductive system is a mess. Narrow, upright walking hips and giant heads led to a protracted and difficult birthing process with a high chance of killing or permanently harming the mother. *Eve* introduced me to a few new glaring design flaws, like how the downward pressure from standing upright squishes down our organs on top of the womb. Or how the fetus and it's mother are basically at war with each other over the course of the pregnancy. After implantation, the placenta sends cells called trophoblasts into the uterine lining. These trophoblasts attack the mother's uterine arteries in order to try to gain more nutrients for the fetus. The mother's immune system fights back, but the fetus deploys a bunch of clever tricks to get around this, like attacking nearby veins with something called placental protein 13 (Or PP13) which inflames the area and keeps the immune system distracted. Throughout the book Bohannan's tone while describing the female reproductive system fluctuates between loving and lovecraftian, which having finished the book, doesn't strike me as too inaccurate.

Our wombs aren't even the weirdest in the animal kingdom. Marsupials have multiple wombs and vaginas, as well as corresponding forked penises to match. The embryos of sharks that give live birth are free to swim between their mothers multiple uteri, feeding on a nutritional mucus instead of a placental connection, even poking their heads out of the cervix on occasion. Birds don't have penises but instead mate with a sort of 'cloacal kiss'. Oh except maybe male weaver birds who have a sort of pseudo-clitorus. I'll let the diagrams below illustrate just how weird they can get.

3) Get Pregnant, Develop your Brain

During childhood the human brain is continually rebuilding itself, blooming with interconnecting neurons then pruning them back to something more manageable.There are a couple phases in which the brain gets particularly busy, particularly around the phases that tend to be the most emotionally tumultuous,

early childhood and adolescence. This restructuring lasts until our mid twenties when things finally start to settle down.

But there's a secret bonus phase of brain development that only pregnant women will ever experience. By her third trimester a woman's brain will shrink by about 5% then slowly rebuild itself over the coming months. This occurs mainly in the parts of the brain related to building emotional attachments, general learning, and memory. It comes with a short-term disruption to memory, emotional regulation, sleep regulation in the same way other developmental phases do.

This seems massively understudied. Bohannon couldn't even find whether this occurred in every pregnancy or just someone's first. I'm very curious if this can be used therapeutically in some way. Readers are invited to get impregnated and report back.

4) When in Danger, Grab a Friendly Toddler

This, according to Eve, is the origin of human monogamy and patriarchy. You see, at some point our ancestors made the switch from a bonobo-like social structure, which was matriarchal, matrilocal, (females stick around while males 'marry out' to other groups), and very very promiscuous, to the typically patriarchal, patrilocal, and monogamous social structures common today. So why did the switch happen? And how? A patrilineal system seems like a non-starter when no one can tell which child belongs to which father.

There's a possible hint in the behavior of savannah baboons. Males will befriend the offspring of high-ranking females with gifts of food until the infant starts habitually clinging to them. Next time they get into a fight with another male their tiny bodyguard starts letting out a cry and the other male now has to face the wrath of it's mother and her entire sisterhood of dominant females. Ingratiating themselves with female hierarchies also makes them a favorable mate for these females and ensures that evolution selects for step-dad behavior. As birthing and childrearing become more difficult and resource intensive, the need to control when and where they give birth lead to a decrease in promiscuity among our ancestors. Combined, all this led to the exchange of sexual exclusivity for protection and provision, setting the stage for a monogamous system.

Homo Gynaecologia

If the above points didn't make it clear enough, *Eve* has a lot going on. But if the book does have a central theory it's this: the critical innovation that drove human success wasn't fire, or tools or agriculture it was gynecology; our ability to control our fertility, ensure the survival of baby and mother and generally manage the ramshackled mess of a reproductive system we've inherited.

Bohannon asks us to imagine the opening scene of *2001: A Space Odyssey* but instead of the bone-wielding ape-man smashing up a tapir skeleton and subsequent cut to space station, it's a pair of ape-women, a birth giver and the first midwife, guiding the baby out, and holding it triumphantly overhead, with a subsequent cut to an orbital *Planned Parenthood*.

This innovation begins with a movement away from the chimpanzee-style of birthing, where the pregnant female has to leave the group out of fear that another member will take the opportunity to eat her newborn. But not eating babies is only the first in a long line of gynecological innovations. Dealing with birthing difficulties is the root of a number of social practices, it's also why we have grandmas and wetnurses.

To elaborate on those last two points, grandmas, or more specifically post-menopausal women, are kind of an oddity. We're the only species that doesn't keep reproducing for our whole lives, except, for some reason, orcas. *Eve's* theory on why we have menopause, is a variation of the grandmother hypothesis. That being that, past a certain point, it's evolutionarily beneficial for women to start caring for their grandchildren over making new children. Bahannon adds that grandmothers are also important stores of knowledge, most importantly gynecological knowledge, which might do something to explain why there's no corresponding grandfather effect and why women enjoy an elongated lifespan.

Wetnurses, too, are a fertility control mechanism. Breastfeeding acts as a weak form of birth control. So the elites of ancient cities like Babylon and Rome would hand over the task of breastfeeding to a servant, since one woman could often

provide enough milk for two children. The mother would then be freed up to get pregnant again without waiting for the infant to finish feeding, and since breastfeeding two children isn't a stronger form of birth control than feeding one, the wetnurse still has the same chance of getting pregnant again. This allowed the elites of early agricultural societies to explode in population. So the wet nursing babylonians could grow their city to 60,000 members by 1,000 BC, while contemporary Jerusalem which favored breastfeeding by the mother lingered at 2,500.

It's a compelling theory but Bohannon is sort of her own opponent here since she also peppers in just as many terrible historical gynecological practices throughout history. Like how physicians in the middle-ages advised against letting newborns feed on colostrum, the thick yellowly breast milk mothers produce right after giving birth, which carries a lot of immunoglobulins to help the baby's newly formed immune system. Or the modern practice of neglecting using female subjects for clinical trials and completely forbidding the use of pregnant subjects, even for drugs like pain-killers which women and especially pregnant women use disproportionately often and intensely.

If I had another criticism it's that Bohannon's feminist tendencies did induce a couple of eye-rolls throughout my reading. She gives enough inclusive nods to trans people that I know she's at least not one of the TERFy variety of feminists but then she goes back to talking about *our* wombs and the struggles *we* endure giving birth and it all feels a bit moot. Bohannon seems to very much expect a female reader.

There are some points when this went from quibbles about phrasing to flat out disagreement. Take her chapter on the evolution of the brain, which explores the question of why developmental tests seem to show the female brain on par with its male counterpart, or even ahead of it in some areas, before abruptly starting to lag around puberty.

Bohannon argues that this is something brought on by the stress of girlhood. The grinding strain of years living in a sexist culture and micromanaging how she presents herself shapes the female brain into something specialized for social awareness and too burnt-out to rotate shapes as well as boys can.

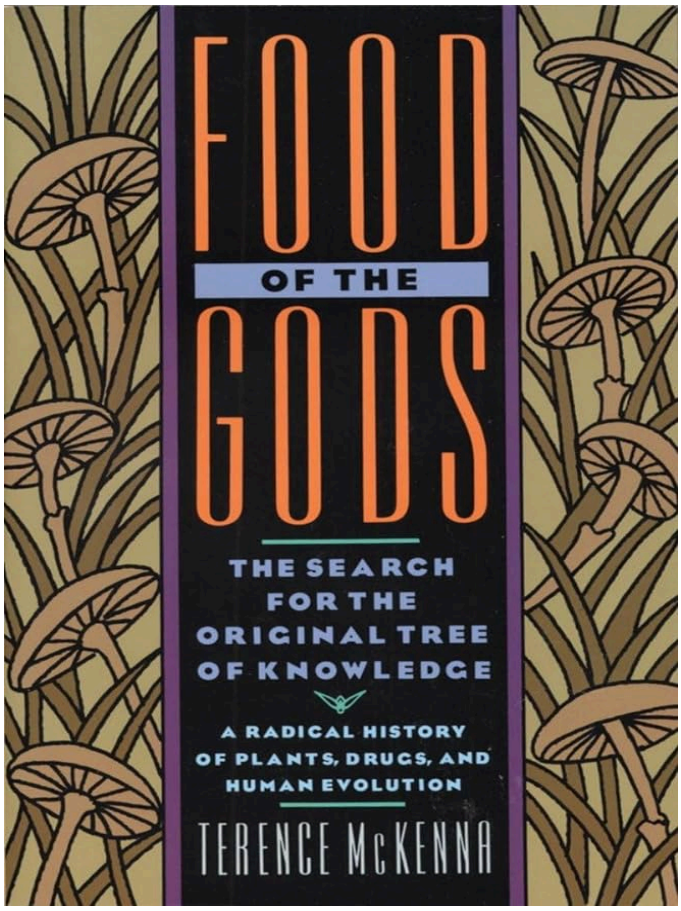
> “As a term, the “male gaze” means too many different things to be useful here. But this fundamental experience—this moment or loose assemblage of moments, somewhere between ages eight and fourteen, wherein a girl starts to *know* that being visibly female means being a thing that’s seen differently—rings true for me. When I asked the women I know if they could remember it, the majority said yes, absolutely.”

I can’t speak for the men Bohannon didn’t ask, but I don’t recall my teenage years as being marked by confidence, low levels of stress or a nonchalant attitude about how the opposite sex was perceiving me. I don’t think the theory is implausible but I'd like to see some stronger evidence. Are, for example, women who grow up in more sexist cultures correspondingly more ‘female-brained’?

There are a couple of moments like this throughout the book, when it strays into becoming the sort of evolutionary *her*story one might fear. But ultimately I can’t be too mad at *Eve* since these moments aren't the norm, and it did leave me with an intense feeling of gratitude at having been born male.

Food of the Gods: The Search for the Original Tree of Knowledge. A Radical History of Plants, Drugs, and Human Evolution, by Terence McKenna

---

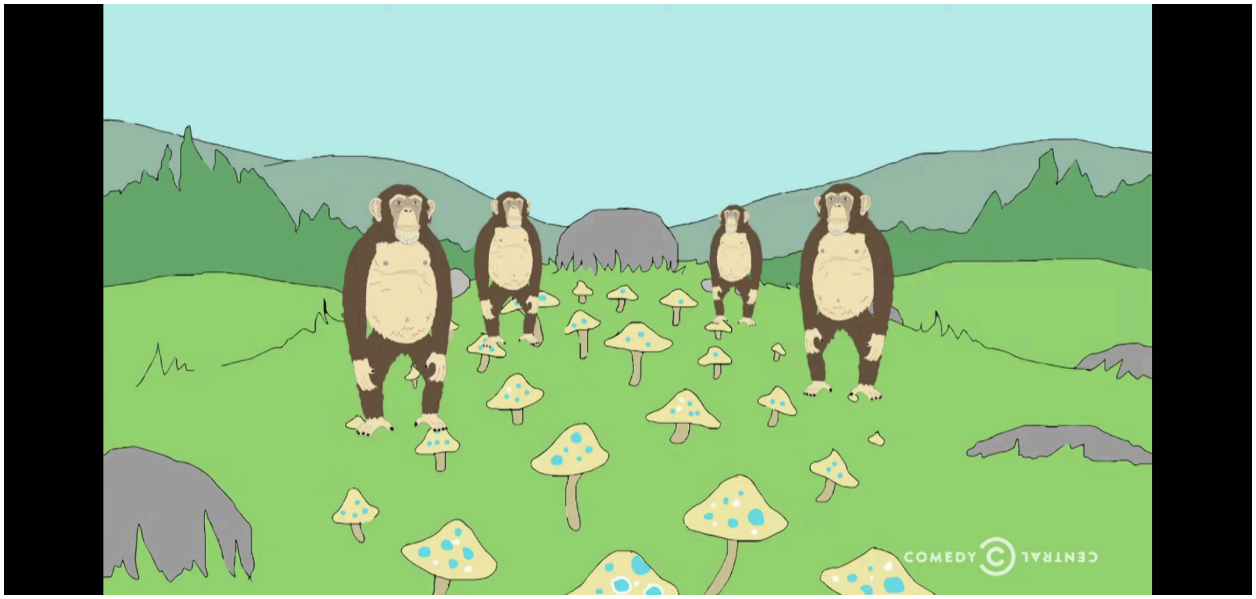


Amazon, *Goodreads*.

The "Stoned Ape Theory" is too weird for real scientists to take seriously, too convenient for a psychedelic activist to doubt, and too catchy for anyone to forget.

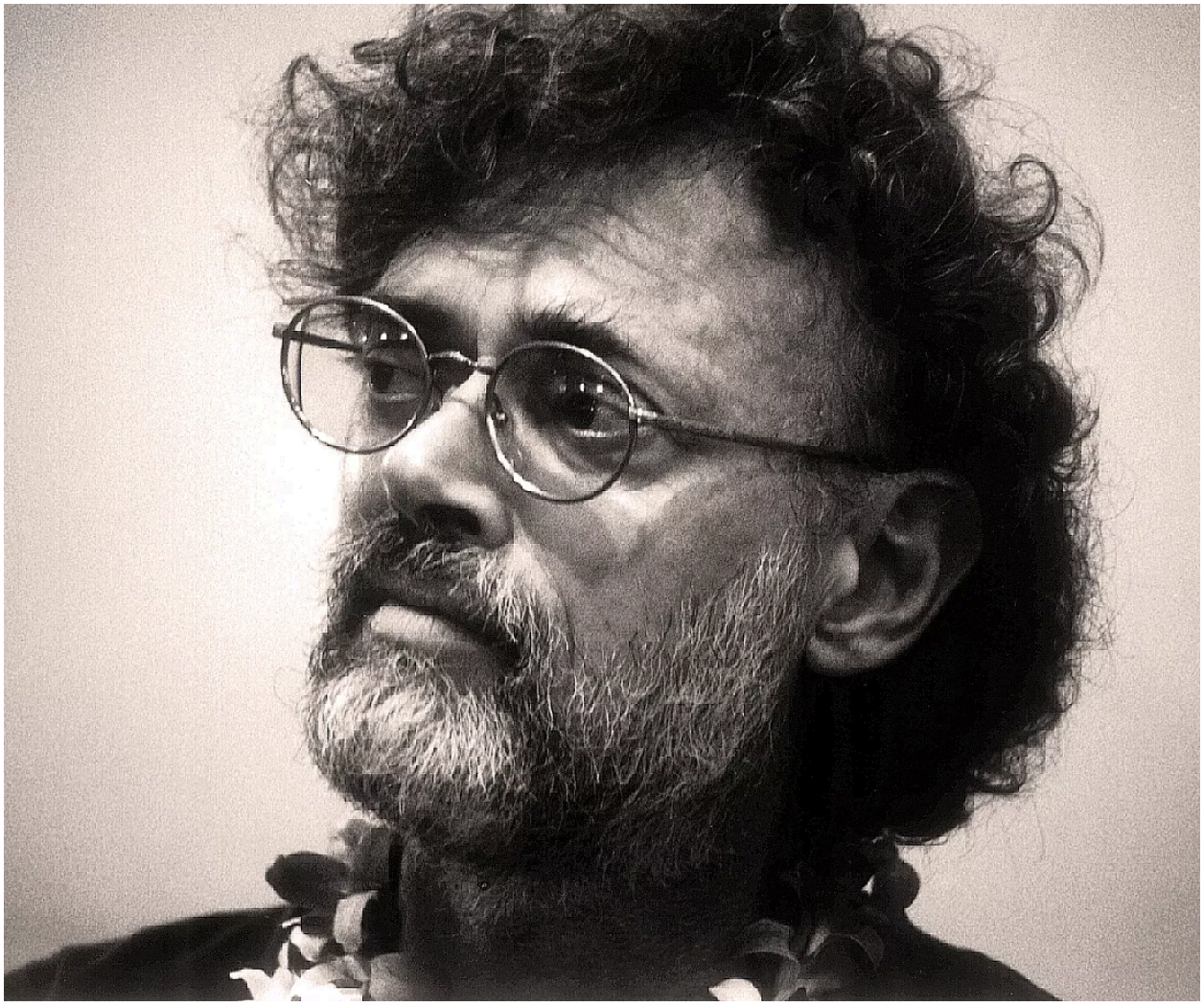
Almost everyone I ask about it knows the gist: human consciousness came from ancient monkeys eating mushrooms (or some variation of that). It's basically preposterous. Similar to how the Victorian minds of the 19th century just couldn't bear the thought of growing out of an ape, it's equally weird to think our minds bloomed from fungus. *The Origin of Species* (1859) faced decades of cultural resistance; now it's obvious. New paradigms of evolution are hard to swallow.

Unlike Darwin's theory though, the Stoned Ape Theory is based on speculative leaps and shaky science, spreading mostly through its catchiness. It's in the opening animation of official Joe Rogan YouTube clips. It's made popular by entertainers (watch: Bill Hicks in 1993). It's the subject of Comedy Central shorts. It's animated in Netflix documentaries. Now, this evolutionary hunch occupies a small sliver in many of our heads, whether we believe it not.



From the Comedy Central animated short, Stoned Ape Theory.

Despite how popular the theory is, most don't know where it comes from. This memetic virus spreads without pointing to its source: *Food of the Gods*, a 1992 book by Terence McKenna—who happens to be one of my favorite thinkers.



Terence McKenna at a panel discussion in Hawaii, 1999.

I've listened to 100+ hours of McKenna lectures in the last decade, but didn't read a full book of his until this year. He's like the Grateful Dead in philosopher form (a psychonautic, encyclopedic bard); just as the band's live shows are way better than their albums, McKenna's improv lectures are leagues better than his books. He'd riff on audience questions for hours, weaving trip reports with the craziest theories you've ever heard, all in a mytho-poetic-comedic style, delivered to a roaring crowd (it's no wonder he became a cult figure to stoners and fringe intellectuals alike).

Food of the Gods is his most popular book by tenfold, and I chose to read this first because I needed clarity on the Stoned Ape Theory: how could a psychedelic trip get into the genome?

The concept always intrigued me but the details never made sense, and so I hoped his 332 pages of careful research and writing could unpack his viral theory for me. I browsed Goodreads reviews before diving in, and was disappointed to learn that no such rigor existed:

> "Possibly the worst researched book I've ever read, it is nonetheless a fascinating meditation on a variety of radical ideas."
>
> “Whether the musings of a fungus-obsessed false prophet or [an]... invite into the realm that granted sentience to our great ape ancestors, Food of the Gods is a must read, and a must discuss.”
>
> "Rambling, ridiculous, and incoherent.”

After finishing it myself I can confirm that *Food of the Gods* is a painful read, even to a seasoned McKenna fan. It is more like psychedelic propaganda than anthropological research. It’s also a structural disaster that seems to miss the point: only 13% of the book covers the Stoned Ape Theory (I was expecting something like *Sapiens* on shrooms, but evolution was only the focus in 3 of the 17 chapters).

All that said, within the book is a kernel of an idea that’s not worth abandoning just yet.

It seems likely and significant that pre-lingual humans were exposed to psychedelics during a critical evolutionary moment two million years ago, but McKenna has no serious explanation for how this moved us “out of the stream of animal evolution and into the fast-rising tide of language and culture.” (p. xvii)

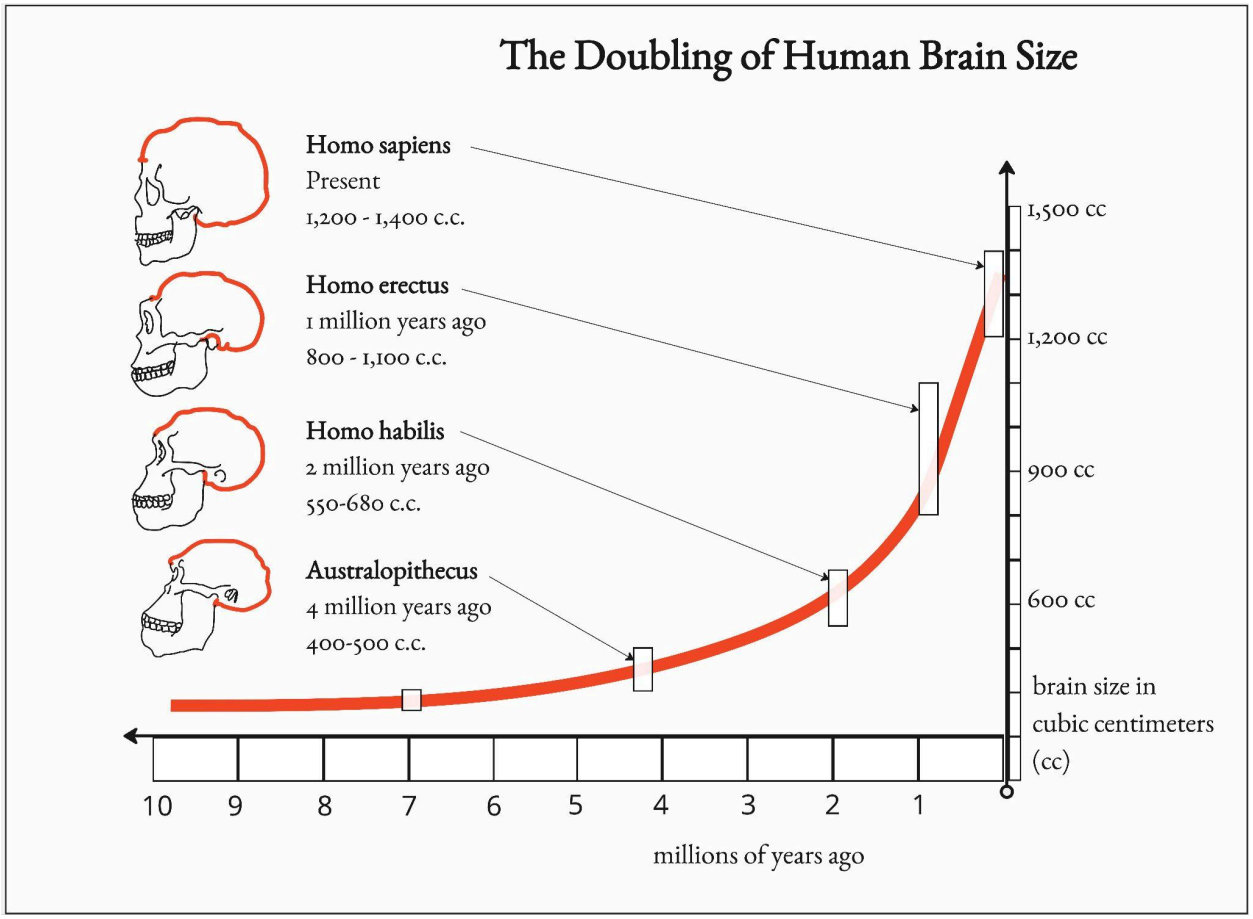
While his *evolutionary mechanism* is flimsy, his *premise* is fascinating.

In the last 32 years, the Stoned Ape Theory has been rightfully critiqued, but wrongfully dismissed. It’s a bold and weird idea, filled with lots of holes, but hovering around something huge. Could McKenna have laid out a tapestry of points around the mysteries of our origins that are yet to be properly connected? The goal of this review of *Food of the Gods* is to: 1) present his setup, 2) critique his evolutionary mechanism, 3) consider how other mechanisms could arise from that same setup.

PART 1:

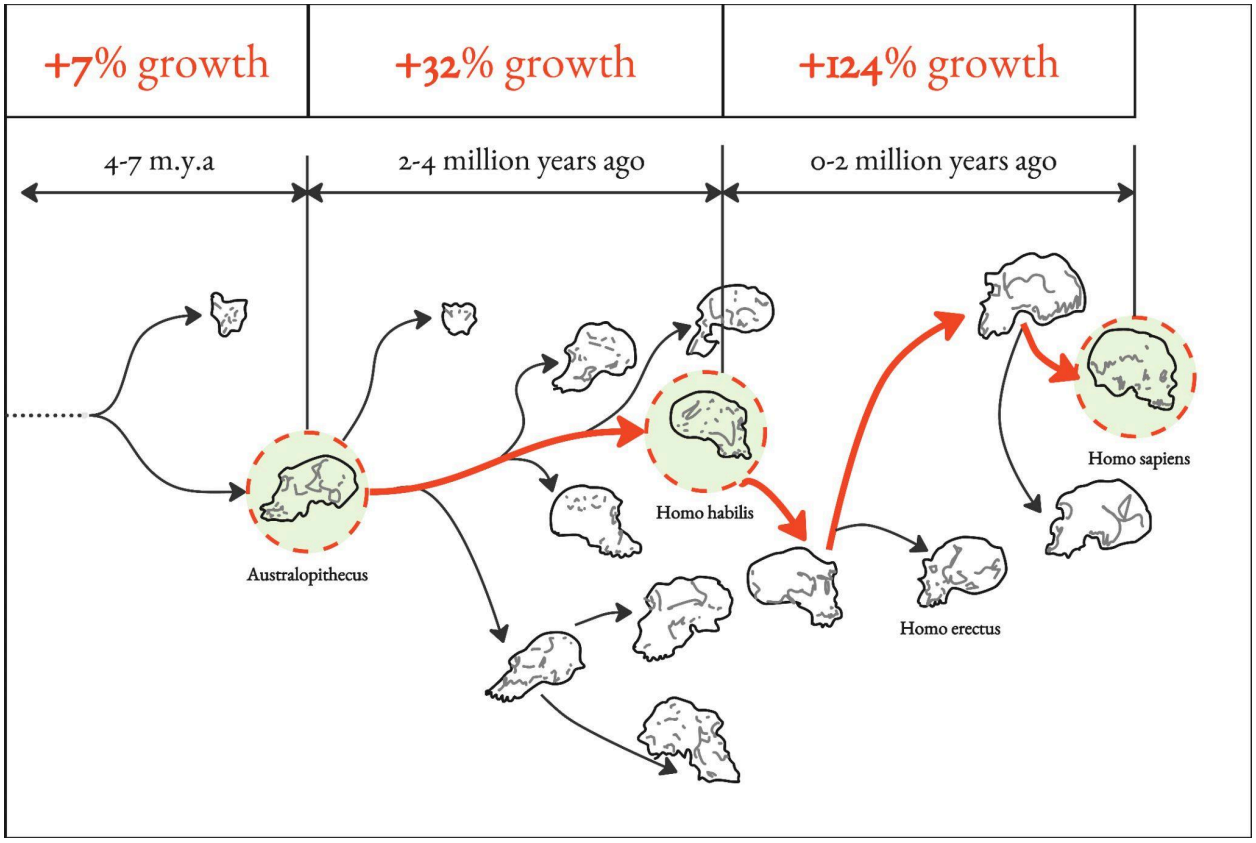
The Food of the Gods Grows in Cowshit

Terence McKenna’s hypothesis is a response to one of the biggest mysteries in human evolution: how did the brain size of the *Homo* genus double in only 2 million years?



Original graphic.

For context, he states that "evolution in high animals ... operate[s] in time spans of ... tens of millions of years" (p.20). From 4-7 million years ago, the brain only grew around 7%. Then, from 2-4 million years ago, it jumped to 32%. Since *Homo habilis* emerged, our average brain size has grown 124%. Why the "sudden and mysterious expansion?" (p.22)



Original graphic.

McKenna cites Lumsden and Wilson (authors of *Genes, Mind, and Culture* from 1981), who call this "perhaps the fastest advance recorded for any complex organ in the whole history of life" (p.24). Even the first chapter of *Sapiens*—the pop anthropology book of our times by Yuval Noah Harrari—addresses this mystery: "What then drove forward the evolution of the massive human brain during those 2 million years? Frankly, we don't know." (*Sapiens*, p.9)

While we don't know exactly what sparked this growth, most theories point back to an extreme moment of climate change.

Between 2-8 million years ago, there were several periods of glaciation across the Northern Hemisphere. Expansive sheets of ice caused the air to cool and dry, reducing rainfall in the South. Rain forests receded and hominids were pushed out of their habitat and into the grasslands and savannahs that were emerging across Africa. This is called the "Savannah Hypothesis," and McKenna alludes to it to frame his theory.

Every theory on how the human brain evolved is some kind of adaptation to the grassland. We relied more and more on bipedalism to navigate an open plain, which freed our hands to carry food, build tools, throw spears, and upgrade our thumbs. These tools—paired with social coordination—let small packs hunt bigger and bigger

mammals, which required the invention of fire to eat meat, which led to more calorie-dense and nutrient-rich food.

From Science Photo Gallery.

According to McKenna, there's another big factor in the grasslands that no one has accounted for:

> "Grasslands have far fewer plant species than forests. Because of this scarcity, it is highly likely that [an omnivorous] hominid would test any grassland plant encountered for its food potential" (p.35) [...] When our remote ancestors moved out of the trees and onto the grasslands, they increasingly

> encountered hooved beasts [along with] **the manure of these same wild cattle and the mushrooms that grow in it**." (p. 37)

McKenna points to a blindspot in evolutionary theory: among all the other forces on the African plains were little mushrooms that accidentally led to synaesthesia, self-reflection, abstract thinking, symbolic communication, and divergent problem solving (you know, the pre-flickers of humanity). Yes, our brains also probably grew from bipedal tool-enabled meat hunting, but en route we likely got enticed by the food of the Gods growing in cowshit.

According to Terence, " human emergence ... is a you-are-what-you-eat story," (p.16) and it isn't just meat. After a species moves into a new environment, their diet is in question and they're desperate to experiment. "The strategy of the early hominid omnivores was to eat everything that seemed foodlike and to vomit whatever was unpalatable" (p.17).

From the Wikipedia entry for Coprophilous fungi (a mushroom that grows in dung).

Psilocybin cubensis is a species of mushroom that grows in the dung of not just cattle or bovines, but all herbivores. A new 2024 study dates *Psilocybe* back to 60-65 million years ago (around the time when the dinosaur-ending asteroid hit). They are *pre-hominid.* The wind spreads spores over fields, dropping them in hot, damp, nutrient-filled cow dung, the perfect microclimate for fungus growth.

It's entirely possible that *Homo habilis* had psychedelic experiences, but how readily available were mushrooms in Africa 2 millions years ago? If mushrooms were the catalyst of the brain boom, then they must have been everywhere, right? Unfortunately we don't have direct evidence of this, and McKenna doesn't estimate volume, but we can at least anchor our speculations in the gross volume of cowshit.

Ancient African herbivores, images from Prehistoric Fauna.

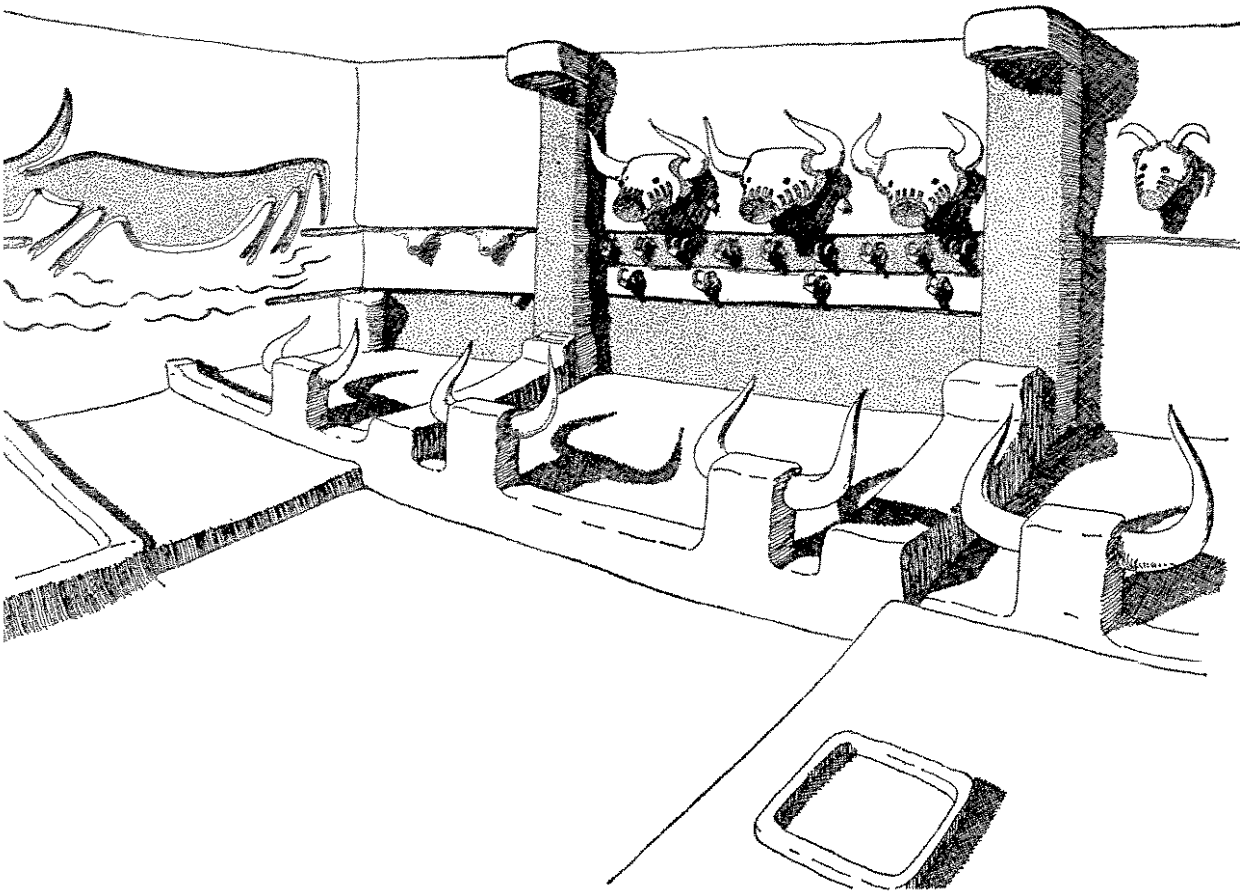
Hypothetical: 10 million African herbivores, dumping 10 dung per day, leaves us with **100 million patties per day** (incredible). Maybe 1 in 3 patties grow mushrooms, but not all of those mushrooms are psychedelic. We can't know the exact rate, but we can speculate it's much rarer. If 1 in 1,000 patties are magic, then that's something like 100k shrooms per day. If it's *a lot* rarer (1 in a million), it's only 100 shrooms per day.

According to a study by Navarette (2016), there were 18,500 members of *Homo habilis* at this time. This means there were either 5 shrooms per person every day (way too much), or that only 1% of the population was getting high. Wherever we landed in the range, there was enough cowshit to get at least *some* apes stoned.

McKenna was the first to propose a human/cattle/mushroom symbiosis as an answer to the mysterious surge in brain size. Since the 1960s, others have speculated on the role of psychedelics in human evolution—apparently, *Francis Crick*, discoverer of the double-helix DNA spiral, was the first (!?)—but McKenna was an ethnobotanist who could refine the details and pitch the premise.

According to Terence, we "bootstrapped to higher and higher cultural levels" (p.39), and the theme of cattle and mushrooms eventually spilled into Neolithic art and religion (around 10,000 BC). He shows us Sahara Desert cave art that features "shamans with large numbers of grazing cattle … dancing with fists full of mushrooms"

(p.70). Then we see Catal Huyuk, “a huge [9th millennia BC] settlement, spreading over 32 acres ... accommodating over 7,000 people”; the excavation is revealing “amazing shrines with cattle bas-reliefs and heads of now extinct aurochs” (p.82). This proto-culture eventually shifts into the soma-fueled Vedic religions of India, where cattle are also worshiped.



On p.83, from “Catal Huyuk: A Neolithic Town in Anatolia” by James Mellaart.

McKenna, in his typical interdisciplinary fashion, pulls threads from anthropology, mycology, and comparative religion to make a compelling case: during an important moment for the *Homo genus*, we were in the presence of a consciousness-expanding mutagen. The food of the Gods was in the humblest of places. Great premise. The problem is, the proposed evolutionary mechanism isn’t nearly as convincing.

PART 2:

Binoculars, Orgies, and Language (but mostly, bullshit)

So let's assume that proto-humans had access to *some* quantity of psychedelics for the last 2 million years. Wouldn't these hominids get high, come down, and be biologically identical? Even if the mushroom promoted neurogenesis, that doesn't make it inheritable. In fact, the whole idea that LSD "may alter the chromosomes" was a media-fueled cultural hysteria in 1967 that had to be debunked. If mushroom experiences don't pass down to your offspring, then how could they have guided evolution?

McKenna has a 3-point theory on how the hominids who ate mushrooms outbred the others; this framework shows McKenna's strength as a meme-maker. The section header is titled: "THREE BIG STEPS FOR THE HUMAN RACE." It's a triad—a 3-step explanation—forged in a way to be memorable, repeatable, and spreadable. This is exactly what happened.

Here's a clip of Joe Rogan reciting the three-part explanation.

To summarize:

- In *low doses,* it sharpens your vision into "chemical binoculars" to make you a better hunter.
- In *medium doses*, it makes you horny, orgy-ready, and more likely to reproduce.
- In *high doses*, it leads to mystical experiences, problem solving, and language.

The framework is an anthropological cartoon, where the tribes who ate mushrooms were better hunters, better bonkers, and better thinkers, giving them a chemical advantage.

> "In such a situation, the outbreeding (or decline) of non-psilocybin-using groups would be a natural consequence." (p.25-26)

McKenna couches his theory by framing it as a "constructed fantasy." He poetically encourages ut to "stand outside the gene swarm ...[of] biological history," and then analytically explains how the three forces are "interconnected and mutually reinforcing" (p.25). The framework is a solid meme, and easy enough to remember and riff to your friends; but when you investigate each point, it falls apart.

Low doses: Microdosing as "chemical binoculars" for hunting

The first part of McKenna's theory comes from a research study done by Roland Fischer in the late 1960s:

> "[He] gave small amounts of psilocybin to graduate students and then measured their ability to detect the moment when previously parallel lines became skewed. He found that performance ability on this particular task was actually improved after small doses of psilocybin" (p.24).

Fischer's study is proof to McKenna that a drug can give you a better model of the world. In terms of evolution, he notes how this chemical mutagen gave hunters an adaptive advantage, and it became "deeply scripted into the behavior and... *genome of some individuals*" (p. 25):

> "... small amounts of psilocybin, consumed with no awareness of its psychoactivity while in the general act of browsing for food ... impart a noticeable increase in visual acuity, especially edge detection. As visual acuity is at a premium among hunter-gatherers, the discovery of the equivalent 'chemical binoculars' could not fail to have had an impact..." (p.25)

"Chemical binoculars" is a remarkable coined phrase, but there are two big problems here: 1) he doesn't explain how microdose-powered hunting can be such an adaptive advantage that it gets baked into the genes of the species, and worse, 2) he's way off on his source: The Roland Fisher study used psilocybin in medium-high doses (160 µg/kg), not low doses (12 µg/kg). It also wasn't about "edge detection," but "visual acuity," and the idea that a faster refresh-rate automatically leads to better hunting in an assumption that ignores the strong body load that occurs on mid–high doses. In fact, Fischer's paper even says that psilocybin"may not be conducive to the survival of the organism" (the exact opposite conclusion that McKenna draws from the same study). Quite the skew.

Medium doses = Arousal, orgies, and growing tribes

So not only are the microdosing hunters gathering more food, but at medium doses they're having more kids.

> "Because psilocybin is a stimulant of the central nervous system, when taken in slightly larger doses, it tends to trigger restlessness and sexual arousal. Thus, at this second level of usage, by increasing instances of copulation, the mushrooms directly favored human reproduction" (p.26).

And it's not just an increased amount of sex as we know it, but medium–high doses change the nature of relationships, sex, and parenting:

> "The boundary-dissolving qualities of shamanic ecstasy predispose hallucinogen-using tribal groups to community bonding and to group sexual activities, which promote gene mixing, higher birth rates, and a communal sense of responsibility for the group offspring."

Does more reproduction automatically benefit the tribe and enhance the continuation of their gene pool? If mushrooms led to orgies and population spikes, that could be a liability for a hunter-gatherer tribe. It's more likely that a stable population size in Ancient Africa would have been ideal for survival. On page 19, he notes that if a species integrates sweet potatoes of the genus *Dioscorea* (the raw material we use for birth control pills) they would find themselves in a diet-induced reproductive chaos. The opposite could be equally true: a mutagen that leads to uncontrolled tribe growth would put a strain on already limited resources.

High doses = God and language

And now, finally, at the highest, heroic doses of mushrooms, McKenna explains two types of effects: mystical experiences and the advent of language:

> "Certainly at the third and highest level of usage, religious concerns would be at the forefront of the tribe's consciousness, simply because of the power and strangeness of the experience itself. This third level, then, is the level of the full-blown shamanic ecstasy." (p.26)

While much of the book unpacks the implications of mushrooms spawning religion, there are fewer mentions about how mushrooms could have been a catalyst for language, sparking an adaptive advantage. Here's the clearest one:

> "Psilocybin's main synergistic effect seems ultimately to be in the domain of language. It excites vocalization; it empowers articulation; it transmutes language into something that is visibly beheld. It could have had an impact on the sudden emergence of consciousness and language use in early humans. We literally may have eaten our way to higher consciousness. In this context it is important to note that the most powerful mutagens in the natural environment occur in molds and fungi. Mushrooms and

> cereal grains infected by molds may have had a major influence on animal species, including primates, evolving in the grasslands." (p. 42)

Out of his three points, the idea of mushrooms catalyzing language is the most convincing, but still, McKenna's case isn't very rigorous. This is the degree of his supporting material (with no footnotes or citations):

> "Researchers familiar with the territory agree that psilocybin has a profoundly catalytic effect on the linguistic impulse" (p. 53).

Right after he explains his 3-point theory, he shifts to address objections from Darwinists. He acknowledges that his theory sounds "smack of Lamarckism." Jean-Baptiste Lamarck was the first person to develop a full theory of evolution (1802), held the reigning theory until Darwin's *Origin of Species* (1859), and is known for being wrong on his theory of "soft inheritance" (that changes to your body or mind within your life can be passed down to your offspring). McKenna frames a question from the lens of Darwinian theory (the question we're all still thinking):

> "While the mushrooms may have given us better eyesight, sex, and language when eaten, how did these enhancements get into the human genome and become innately human?" (p.27)

McKenna's whole theory hinges on a good answer to this question, and unfortunately he fumbles it. In a dense 200-word explanation, he implies that language, vocabulary, and memory offered such a radical survival advantage that it created an eat-mushrooms-or-die situation. He's saying that speech-like behavior "spread through populations **along with the genes that reinforce them**" (p. 28).

Now he's talking about natural selection, but he's not being specific... The basics of natural selection says that, over generations, certain gene-environment combinations give members of a subspecies a survival and reproductive advantage; those without the right traits die out, and so the population fills with those who have it.

In order for the psychedelic experience to have altered the path of evolution from *Homo habilis* to *Homo sapiens*, three things must have been true:

1. Due to location, only a subset of the population got access to the mushrooms.
2. Among those who ate them, only some percent of users had (unspecified) "language genes" that enabled them to better conceptualize and vocalize their intentions.
3. The ability to wield language had such a significant survival advantage, that anyone who couldn't talk got outbred.

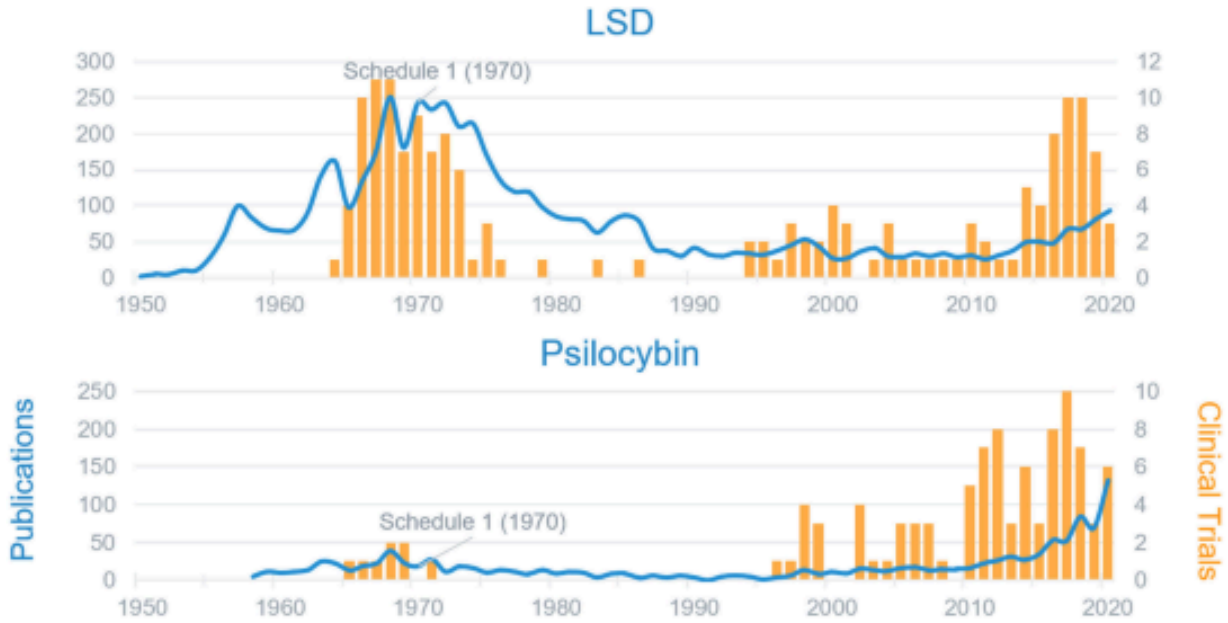
This is pretty shaky, not just because there's no detail on how genetic variance causes some to burst into language and not others, but mostly because it makes little sense how a few extra words would put another tribe

out of existence. Sure, I'd imagine a *Homo erectus* tribe of 1,000+ words with advanced grammars could out-smart and out-hunt a nearby *Homo habilis* tribe with only 50 words. But the accumulation of language likely happened extremely slowly; based on the rate of vocabulary growth, we're talking 1-5 words *per millennia*. Humans weren't just competing against each other, but lions, who don't play in the realm of words. So even if mushrooms enabled a genetically-blessed subspecies of *Homo habilis* to invent a few new phrases, McKenna isn't making a case for how this threatens the existence of non-psychedelic tribes.

Basically, all three points of McKenna's framework—vision, sex, and language—are cartoon mechanisms for evolution. It's totally possible that 2 millions years ago, hominids were surrounded by fields of mushrooms and had profound psychedelic experiences, but there's still no real explanation for how it catalyzed humanity and fostered the explosion in our brain size, structure, and function. Based on what's presented in *Food of the Gods*, it's not clear how mushrooms are a factor in evolution at all, let alone *the main factor*.

Food of the Gods makes more sense when you understand the climate it was written in: a psychedelic blackout. In 1971 they were made illegal, and until 1995, the most qualified researchers in the world couldn't touch them (after serious breakthroughs in the '50s and '60s). Now, it's obvious we're in a "renaissance" with forward progress. But from '71-'95, there was no knowing if the situation would ever change. This led to an intellectual counter-movement, where whole books were written as a plea for legalization (their argument generally goes, "Look! Psychedelic use existed here, here, and here, so therefore, we have no right to keep these sacred plants illegal."

Look at 1992 (the year Food of the Gods was published): publications on psychedelics were at an all-time low (since their discovery), and 0 clinical trials were conducted with LSD or psilocybin. It was bleak.



From a [2023 report](#) on psychedelic assisted therapy.

As soon as McKenna introduces the Stoned Ape theory he moves on, and from page 57 on we're in the territory of his psychedelic manifesto, which I can summarize in 3 points:

- **Chapter 5**: Agriculture is the fall from Eden into history, ruled by a "dominator culture" of "pathological monotheism" (p.64). He makes a Learian plea for an Archaic Revival: "a clarion call to recover our birthright ... It is a call to realize that life lived in the absence of the psychedelic experience upon which primordial shamanism is based is life trivialized, life denied, life enslaved to the ego and its fear of dissolution in the mysterious matrix of feeling that is all around us. It is in the Archaic Revival that our transcendence of the historial dilemma actually lies." (p.252)
- **Chapter 6-14**: Our substance addictions stems from an "existential incompleteness" from losing touch with the mushroom. He covers the history of drugs, from prehistory through the 20th century. He gives a literally exhaustive survey of mushrooms, ergot, cannabis, hashish, sugar, coffee, tea, chocolate, tobacco, LSD, cocaine, heroin, DMT, and television.
- **Chapter 15**: The last page of the book is a 10-point drug policy, showing the real intention of this whole effort: activism. He covers taxes, the IMF, cartel laws, research, and education.

Here are two more quotes from Goodreads on how the messianic mushroomism gets tiresome:

> "You can like mushrooms without believing they are the cause of all human innovation, religion, and culture."

> "The contortion of historical evidence to make the mushroom the [center] of human evolution, societal development and ultimately suggesting we should all go back to its regular consumption eventually became ridiculous."

You might be surprised to learn that Terence McKenna confessed to having little concern for academic accuracy. Here's a quote from one of his lectures:

> "Since I feel pretty much around friends and fringies here, it doesn't trouble me to confess ... FOOD OF THE GODS, I conceived of as an intellectual Trojan horse. Written as though it were a scientific study, citations to impossible-to-find books and so forth ... simply to 'assuage' academic anthropologists. THE IDEA IS – to leave this thing on their doorstep; rather like an abandoned baby, or Trojan horse."

This pisses off a lot of McKenna fans, and causes accusations ranging from him being a complete fraud to a mal-intended CIA agent. When asked about his book in this interview, he sees it as a catalyst in a larger culture war. He wanted the unjustly illegalized drugs to be situated in a human origins scenario. In the same way that Darwin's theory reset the 19th century Victorian mind, he hoped that equating psychedelics with evolution would trigger a new openness to them. He wanted to make the switch from:

> " 'Drugs are alien, invasive and distorting to human nature' to:
>
> 'Drugs are natural, ancient and responsible for human nature.' "

For what it's worth, I don't think McKenna was lying or intentionally deceptive. I think he had a good hunch and acted on it, but in the act of crystallizing it into a book, he was less interested in careful analysis and more interested in using his position as a psychedelic guru to shift the culture. His target audience was "drug-friendly 18-25 year olds" who would spread the ideas into the mainstream.

> "You've heard me talk about meme wars, and how, if we could have a level playing field, these ideas would do very well."

It was only ever about the meme... and it worked. While it's impossible to know the degree of influence McKenna had on today's resurgence in psychedelic interest, his theory went viral without any real grounding. Maybe McKenna succeeded in his goal, but passionate activism doesn't lead to good science.

Illustrated beer label by Pedro Correa.

PART 3:

The Babbling Idiot and the Tribe

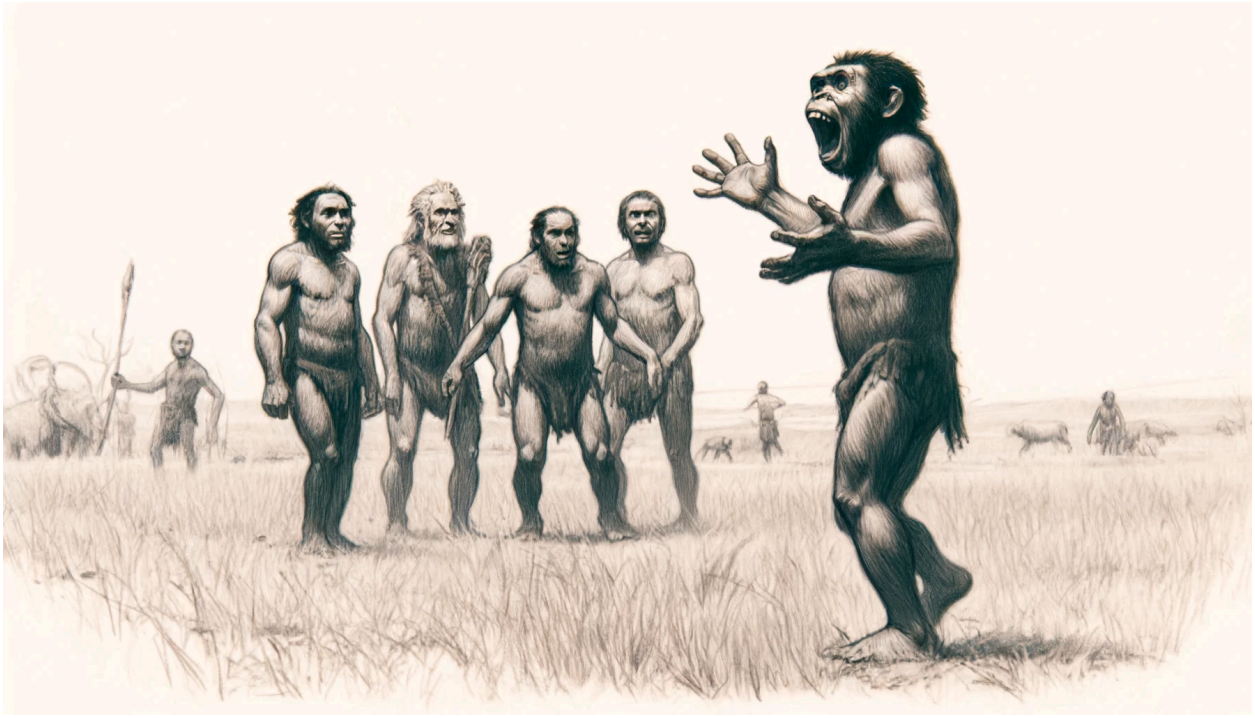
Despite all the problems laid out above (bad research, bad arguments, bad intentions), I still think he's onto something: psychedelics never got into the genome, but at a critical moment in our evolution, our pre-language ancestors moved into a new grassy environment, one filled with mushrooms that are *now* proven to radically activate the language-forming centers of our brain.

Since 2014, a new wave of university-backed studies have confirmed a lot McKenna's intuitions: psilocybin aids in abstract thinking and symbolic communication; it reduces top-down control and fosters spontaneous language; it increases semantic association, expanding the repertoire of usable words, and even facilitates the creation of new ones. Damn. We can't know exactly how mushrooms affect *Homo habilis* vs. *Homo sapien*s, but there's reason to believe something happened.

For one paragraph, I'd like you to entertain my own anthropological cartoon. It exists within McKenna's premise, but without the glorification of the mushroom or the user. I call it: The Babbling Idiot & The Tribe.

Imagine a hungry apex hunter stalking a Megalotragus, and in the process he comes across a dung patty that's filled with a few mushrooms (appetizers). Unknowingly, he consumes a heroic dose of *Psilocybin cubensis*. An hour later, hunting is out of the question. There is slight nausea, a weirdness, and eventually, the spontaneous creation of mouth noises. As he comes back into contact with the tribe, he's not just tripping, he's grunting and riffing in ways they can't understand. It's frightening. From a state of synesthesia, the Babbling Idiot is attempting to make abstract connections between his intentions and sounds. You can imagine hundreds of

proto-words coming through over the hours, none of them crystallizing into meaning. But in rare cases, perhaps aided by gestures, the tribe groks what he means. Still, in most cases the words are forgotten, but some are coined in such a way that they're useful *and* memorable. The babbling idiot was a temporary conduit for the logos, and comes down with little to no memory of the ordeal. Sobered up, he hears a new word moving around the tribe, and asks, "what do you mean?"



Generated with GPT-4.

This story inverts all of psychedelic romanticism that was baked into McKenna's theory:

- Mushrooms didn't need to be plentiful; this might have happened once in the life of a tribe.
- The whole tribe didn't need to take them; it could've been a single person.
- It wasn't brave or intentional; it could've been accidental.
- They didn't turn into a superhuman hunter, lover, or linguist; they became a babbling idiot.
- They didn't come down more evolved; they barely remembered it.
- The hero isn't the psychonaut; the hero is the sober tribe who paid attention through the chaos to catch and remember the words that mattered.

To bring this back to evolution, magic mushrooms may have simply been a catalyst for linguistic mutation. Over a tribe's life, the lead hunters would accidentally get stoned a few times, and it would lead to outpourings of gibberish. In some cases it would threaten the survival of the tribe, in most cases it would have been kind of annoying, and in rare cases it would lead to the creation of a re-usable word.

McKenna was—literally—a remarkable babbler, and would even demonstrate it to his live audiences. He referred to it as "glossolalia," the spontaneous urge to form speech on high-doses of psilocybin, despite it being void of meaning. It sounds eerie, almost like he's speaking in tongues. This happened to him often enough that he started recording his outbursts on tape recorders. Now he can simulate it at will while completely sober. You can check out this 15-second version, or a longer version titled, "Recordings Which People Find Extremely Alarming."

It's not that psychedelics got into the genome, it's that over many millennia they mutagenically expanded our repertoire of language.

The evolutionary mechanism here isn't the mushroom, it's language itself. Psychedelics can restructure *your* brain, but not your kid's brain, and that's okay, because the *artifacts* from a single trip are strong enough to infect everyone around you—*even if they're sobe*r. Think of the words, music, art, culture, and technology that came out of the 1960s from a small subculture of trippers. Through mimesis, language ripples through culture like a shockwave. It's time we consider that *the word itself* might have been the original burst from the mushroom.

Consider the power new words might have had on a Homo habilis with a vocabulary of less than 50 words. They had the linguistic range of a 1-year old, and used basic utterances and gestures for food, danger, and water. A million years later, homo erectus, with brains almost double the size, had fire, technology, but also a modern vocal tract, with a vocabulary over 1,000 words, putting them at the fluency of a 3-4 year old. By the time Homo Sapiens were forging words in Egyptian cuneiform, their vocabularies were over 10,000 words.

The doubling of our brain size matches a logarithmic growth in our vocabulary, and so it brings us into a chicken-or-the-egg situation. Which guided which?

The natural assumption is that a growing brain breeds the hardware for language, but what if the opposite is also true? Over millennia, could increased vocabulary put pressure on the brain to grow? Could the two have existed in a feedback loop? Were ancient brains significantly smaller because of the absence of language? How does this relate to the critical window of language learning? Might the mysterious doubling of our brains come down to a lineage of babbling idiots on mushrooms who slowly brought words to the tribe?

Answering these questions is beyond my expertise, and beyond the scope of a book review on *Food of the Gods*. But these musings have led me to the book I'll read next: *The Symbolic Species: The Co-evolution of Language and the Brain* (1998), byTerrence Deacon (Amazon, Goodreads).

While Food of the Gods is dense, and the Stoned Ape Theory is flawed, Terence McKenna's viral idea is an outlier in that there's actually more depth the further you look into it. After reading Terence, I'm more energized than ever to return to his lectures and engage with his exotic ideas. If McKenna is the babbling idiot,

then we are the tribe tasked to listen carefully, patiently, and forgivingly, because the guy on mushrooms might be onto something.

For Whom the Bell Tolls, by Ernest Hemingway

“I wish that I were going to live a long time instead of going to die today because I have learned much about life in these four days.”

(1940). Robert Jordan is an American volunteer, apparently of the International Brigade, during the Spanish Civil War in 1937. He’s not a communist but simply and fanatically an anti-fascist. Yet he demands to be called comrade, and will sacrifice everything for and turn himself solely into an instrument of his Red Army superiors. And, at present, the purpose of this instrument is to blow up a strategic bridge in the mountains of central Spain. While holed up in a cave behind enemy lines with the other Loyalists awaiting the attack, amidst all the claustrophobia and paranoia of cave life, the dynamiter falls in love with a young woman named Maria, who had been rescued during a previous skirmish after being imprisoned and gang-raped by Moroccan fascists.

I never realized it before but Hemingway’s oeuvre is refreshingly manageable. Turns out I already read most of it when I was 12. This was my second reading of this unusual war novel. But maybe all guerrilla wars involve drunks and lovers, mystical insurgents, and portentous spats at camp.

The novel is mostly mundane, then suddenly tense as hell, then mundane again, lulling you into a stupor in order to slay you with a sentence, as Hemingway likes to do. The ending is, as in A Farewell to Arms, yet another punch in the gut. The action scenes are vivid (the man could write) and concisely edited, like in a Hitchcock movie. The quasi-epic tone, repetitive and incantatory, is basically just Hiawatha, for some strange reason. A lot of times, though, the dialogue and extensive interior monologues are very robotic-sounding, as if the war had necessarily turned the characters into machines. You can feel the numb desperation behind it as Jordan stubbornly tries to stay focused on his mission. And then what happens is the repetitions start to develop an almost symbolic quality. “The bridge,” for example, gets echoed so many times you begin to think it has some metaphysical meaning. It’s a pretty weird book! But one thing you can’t accuse Hemingway of is carelessness. You can feel the deliberation he puts into his craft.

More about the style, because it is a curious blend. Though frequently undercut by vulgarities, the language is heightened, without being flowery. The author is not shooting for realism, despite the grim subject matter. He takes a lot of poetic license, such that his peasant characters will occasionally seem to go into protracted trances full of run-on sentences, as if channeling their maker. By using literal translations of Spanish idioms, Hemingway gives you some of the soul of Spain, the at once mannered grandiosity and rusticity of its people. The whole production is so stylized it can easily sound silly, and often does. It boils down the style of Hemingway’s previous novels at the risk of self-parody. I thought maybe he was influenced by

The Grapes of Wrath too, since this novel was written on the heels of it in 1940 and both have the same scope and important airs.

The author mostly keeps his gunpowder dry, but this makes his poetic explosions more potent, like during the love-making “to nowhere” scene. The passage is very tenderly written, a little Gertrude Stein-interlude, and with subtle artistry imitates the rhythms and dark probings of having sex with someone for the first time, that feeling of searching for something, blindly. You assume, as the clauses rise and fall but continue to build, that what Jordan will finally find in the end is an orgasm, yet what appears at the climax (culminating in a lovely rhyme) is not his own gratification but… the other person, Maria:

“For him it was a dark passage which led to nowhere, then to nowhere, then again to nowhere, once again to nowhere, always and forever to nowhere, heavy on the elbows in the earth to nowhere, dark, never any end to nowhere, hung on all time always to unknowing nowhere, this time and again for always to nowhere, now not to be borne once again always and to nowhere, now beyond all bearing up, up, up and into nowhere, suddenly, scaldingly, holdingly all nowhere gone and time absolutely still and they were both there, time having stopped and he felt the earth move out and away from under them."

That’s what he was searching for. The woman he loves. That’s intercourse in the ideal.

The romance is wonderfully open and simple. We could all learn a lesson from it. Jordan doesn’t let shame get in the way of making his interest known, despite the lack of privacy. The woman likes her hair to be stroked by him, like a pet. The situation they’re in is too dire to let any pride or embarrassment get in the way of their love.

Hemingway keeps the motivations of the players in his drama as clean as he can, with only a couple wrinkles to bring them to life. I became involved in the character of Pablo, the leader of the guerillas, once I was shown his vulnerability. I hated him, as I’m supposed to, for his opposition to Jordan, and yet like the villain in a good western his position is nuanced. Again and again we’re told Pablo is smart, the smartest of the bunch, and that bears out. Actually, as Jordan himself notes, the disillusioned old drunk is the only one trying to save everybody from Jordan, our presumed hero. Evil Pablo is the one we should arguably be rooting for, not the American with his suicide mission.

Hemingway seldom flinches before human nature, even when it’s ugly. At one point the novel suddenly discusses the sexual dynamics between old, gross Pilar and young Maria, despite the former being a mother figure to the girl. For all the mockery he receives about his simpleton machismo, show me another writer so willing to stray into uneasy emotional territory if that is where the honest path should lie. Hemingway simply doesn’t think we should dwell there. He also doesn’t shy away from showing the corruption and cruel stupidity of the anti-fascists.

So, what drives the plot? Most of the nearly 500 pages is them waiting to do the big job. Part of the tension derives from watching these people try not to break under the strain as the attack

draws near. Pablo is another monkey wrench, as the growing tensions with him pose a danger to the mission. From Pilar's palm-reading on down, Hemingway keeps diligently tamping down any suspense that might build up about the outcome. Thus the bulk of the novel becomes an inquiry into impending doom, with Jordan juggling his responsibilities to the cause while absorbing new ones in his love for Maria and these people. But it never quite presents a dilemma to him.

His math is brutally utilitarian. Robert Jordan will fight alongside these good people even unto certain death in order to defeat a future full of death. He doesn't care about politics or which system of governance wins, he just wants to stop the killing, and must kill to achieve that. Briefly, Jordan does question if it would indeed matter, in the long run, if the fascists won, but all he has to do is recall the atrocities the enemy has committed to decide that it would.

Of course we now know the fascists did win, and it didn't make a difference in the long run. Franco ruled for decades, oversaw liberal reforms, became a US ally, and all Robert Jordan's extinction-level rhetoric quickly became dated. I respect the way the character often relies on rationality to force himself to face reality, but in this case he was misguided. The fact of the matter is people can be butchers during a war and then hang up their cleavers once it's over. The Republicans all died for nothing and Robert Jordan should've absconded with Maria and lived a peaceful life in Sun Valley, Idaho or wherever.

Pablo was right.

Frankenstein, by Mary Shelley

What does it mean, to be monstrous?

If we want to talk about the monstrous, to assess and understand it, surely we must look at the monsters which mankind has created. But this isn't quite enough. Humanity has been creating monsters for millennia, with no signs of slowing down. The vast majority fall by the wayside, into obscurity. What is it about ghosts and witches, vampires and werewolves which make them into enduring abominable creatures? Why are they so impactful? What brings these impotent fictions into our culture, not as banal curiosities, but fascinating living things, filled with moral significance, surrounded with an air of myth and terror? What does it mean to be truly monstrous?

I'm sure you'll be glad to hear, for the sake of time, there is only one monster which we need to study in order to understand the monstrous. He is an unusual one. A changeling of sorts, and suitably nameless. Imbued with both life and renown by the man, the scientist, the poet they call Frankenstein.

Frankenstein's monster is perhaps the only shambling monstrosity within the Halloween canon to have gained a reputation for being just as misunderstood as it is understood. Even if you haven't read through Bram Stoker's Dracula, you'll still have a firm grasp on the basics of what a vampire is, and what Dracula is like, simply based on cultural diffusion. Zombies are gross (un)dead people that hang out in herds. Ghosts are clean(ish) dead people that float through walls. Witches cackle and cast spells, while mummies curse people and wear toilet paper. Yet, behind his stitches and the bolts in his neck, Frankenstein's monster is uncertain. He is nameless, yet he has a name. He is brainless, yet intelligent. He is a monster which is no monster at all, subservient to the monstrosity which Victor Frankenstein himself cursed this world with. Or is he? The more you dig, the more you'll find that everything about the monster we call Frankenstein is a contradiction. In my opinion, these contradictions are revealing. They tell us a story, about what makes a monster monstrous, and about the things which humanity truly fears.

That's what this essay is all about. It is about *Frankenstein*, the 1818 book by Mary Shelley, and *Frankenstein*, the 1931 film directed by James Whale, and above all, Frankenstein, the timeless creature born of science and lightning which we all know today. It is about fictions, and monsters, and how we entwine the two in strange ways. About how we might learn more about the world around us, once we understand how we paint it. With that out of the way, let's get this review started.

The Romance of Written Word

When I started up this little project, I was quite surprised to find that Mary Shelley's *Frankenstein* is a Romance. Not a small-r romance, found in cheap paperbacks at the airport, but the old, forgotten movement. A Romance of the spirit. Grandiosity and kindness, the overwhelming beauty of nature, and the whirlpool of crippling emotion which consumes the greatest of men. While reading the book, I was surprised just how frequently I had to stop, glance at the cover, and mentally remind myself that this was a horror story.

Because, for much of the novel, *Frankenstein* isn't a horror story. It tells the tale of Robert Walton, who has thrown away a life of wealth and comfort and instead embraced brine and wonder; hiring a ship to explore the unseen wonders of the arctic. It tells the tale of Felix, thrust with his family into poverty after freeing an imprisoned man; a foreigner sentenced to death over little more than the jealousy of nobles. The tale of Elizabeth Lavenza, (adopted) sister and gracious lover of a man too plagued by his genius to accept her. Of Henry Clerval, chivalrous companion eager to learn great things and spread them abroad. Of Justine Moritz, caught between a cruel family of birth and a generous family of adoption. Of Alphonse Frankenstein, a man of integrity who wed a poor, hardworking girl, orphan to a friend who died in cruel exile.

And of course, there is the tale of Victor Frankenstein, his son. Raised by virtue and kindness, astounded by the beauty and myth in the world. Victor stumbles onto more superstitious works in his childhood, which he eagerly engages with before his life takes a dramatic turn at the age of fifteen, during a thunderstorm.

> As I stood at the door, on a sudden I beheld a stream of fire issue from an old and beautiful oak, which stood about twenty yards from our house; and so soon as the dazzling light vanished, the oak had disappeared, and nothing remained but a blasted stump.

It is suitable that Victor's true passion is kindled by a lightning strike. A fellow resident explains the phenomenon of electricity to young Frankenstein with such zeal that the lad can't help but turn his studies to the realm of science. With time, this would lead him down the path of the impossible. All the foolish superstitions and ineffectual incantations of yesteryear, met with the progress and doggedness of scientific inquiry. Victor Frankenstein would learn how to create life. And regret it forevermore.

Most of *Frankenstein*'s quirks can be explained by this odd dichotomy. The natural push and pull between Shelley's inclination to create a work of Romance, slated in high moral ideals and the trials inflicted on those who pursue them, and her inclination to create a work of Horror, a tale of the grotesque things which bring mankind to ruin. I wish I could say that she threaded the needle perfectly, but the novel is a bit stilted in parts. Side stories often go on too long for what they add to the overall story, and the dramatic moments are sometimes undercut by noticeably dry prose. That isn't to say that *Frankenstein* is undeserving of its status, though. Every so often, these two goals entwine with one another, and Shelley manages to write things so uniquely provocative as to make any small flubs irrelevant. For instance, at the start, Victor is from the same stock as every other character in the book, pursuing a wondrous Romantic ideal:

> Life and death appeared to me ideal bounds, which I should first break through, and pour a torrent of light into our dark world. A new species would bless me as its creator and source; many happy and excellent natures would owe their being to me.

Yet, as Victor comes closer and closer to creating his masterpiece, he descends into a mania. He shuts himself in a tower, starts raiding graveyards for materials, running tortuous experiments on animals. He becomes so singularly focused on his task as to ignore everything around him. The Romantic ideal which he pursues is revealed to the audience to be the exact opposite. Among his peers, Frankenstein is the one man who fervently pursued horror. Every trial which others were meant to overcome was his warning, meant to be heeded. Passion was the strength of all others, their sole comfort in trying times. But for Victor Frankenstein, it yields nothing but sickness and death.

The Horror of the Human Heart

> …now that I had finished, the beauty of the dream vanished, and breathless horror and disgust filled my heart.

Once his creation is complete, Victor joins the audience in his understanding. He sees the monster as an abomination, and flees, abandoning the thing. There is a brief, excellent scene where the monster breaks into Frankenstein's bedchamber during a rainstorm, but once that has passed… Nothing. The creature fades into the background, and Victor begins a slow recovery from the mania which gripped him.

This sets the general pace for the rest of Frankenstein's story. A moment or two of gripping horror, followed by months of Victor reeling from the emotional trauma. Just as he begins to recover (usually by observing the wonder of nature), his creation strikes again. Corpses are made of friend and family, and eventually poor Victor is found alone in the arctic, with only his story and an unceasing desire for vengeance against the being which shattered his life to pieces.

Appropriately, most of *Frankenstein* is narrated by Frankenstein, and Victor's narrative is a clear one. He reflects on his life towards the end of the book, so I'll let the man speak for himself. His monologue also does a decent job of illustrating Shelley's style during the more dramatic bits, so I'll let you read the full chunk.

> 'I believed myself destined for some great enterprise. My feelings are profound; but I possessed a coolness of judgment that fitted me for illustrious achievements. This sentiment of the worth of my nature supported me, when others would have been oppressed; for I deemed it criminal to throw away in useless grief those talents that might be useful to my fellow-creatures. When I reflected on the work I had completed, no less a one than the creation of a sensitive and rational animal, I could not rank myself with the herd of common projectors. But this thought, which supported me in the commencement of my career, now serves only to plunge me

> lower in the dust. All my speculations and hopes are as nothing; and, like the archangel who aspired to omnipotence, I am chained in an eternal hell. My imagination was vivid, yet my powers of analysis and application were intense; by the union of these qualities I conceived the idea, and executed the creation of a man. Even now I cannot recollect, without passion, my reveries while the work was incomplete. I trod heaven in my thoughts, now exulting in my powers, now burning with the idea of their effects. From my infancy I was imbued with high hopes and lofty ambition; but how am I sunk! Oh! my friend, if you had known me as I once was, you would not recognise me in this state of degradation. Despondency rarely visited my heart; a high destiny seemed to bear on, until I fell, never, never again to rise.'

He is a great man, capable of great things. In his pursuit of horror, he is punished forevermore. Everything that was wondrous about the brilliant Victor Frankenstein only serves to deepen the chasm he is cast into. It is a story of condemnation and warning, to turn away from the passions which break your humanity. A call for great men to lessen themselves, to change direction, lest they find their life made ruinous by the very thing they pursued. He is a God who was merely a man. Perhaps a later quote does him more justice.

> 'Seek happiness in tranquility, and avoid ambition, even if it be only the apparently innocent one of distinguishing yourself in science and discoveries.'

But there is another story lurking in the background of *Frankenstein*, one which contradicts Victor's prevailing narrative. It's high time I gave the wretch his due. Let's talk about Frankenstein's monster.

As presented by Mrs. Shelley, the monster is a being of frost. He is pervasive within the narrative, but rarely physically present. He lingers like the chill of the morning. A reminder of the frigid night behind you. An omen of the night to come. The monster lives as he is, apart from society and the love of mankind. Victor designed him well. Expertly, even. He can endure extreme environments more easily than humans, and readily survives off of whatever he can forage, even in the middle of winter. He is a hulking tower of a man, strong yet surprisingly stealthy. Even his mind is hearty, and within a few months of time he becomes both literate and articulate, with a booming, compelling method of speech. And he is beautiful. But alas, his beauty is reserved for only one man, at one time. Victor Frankenstein, in the heights of his mania. To a man fascinated with animating dead flesh, the results speak for themselves.

> His yellow skin scarcely covered the work of muscles and arteries beneath; his hair was of a lustrous black, and flowing; his teeth of pearly whiteness; but these luxuriances only formed a more horrid contrast with his watery eyes, that seemed almost the same color as the dun-white sockets in which they were set, his shrivelled complexion and straight black lips.

The monster is, as the kids say, super-uggo. His features carry an almost supernatural repulsiveness throughout the entire book. The moment a sane or kind person looks upon his

features, they find themselves reeling in disgust, sometimes violently so. Anyone who stumbles across the monster is driven to immediately suspect the worst. Rocks are thrown, guns are fired, old men and little girls are protected, and peace is restored to society, once the monster is driven away.

The tale of Frankenstein's monster is a strange tale indeed. Though he was born in horror, it should be little surprise that the monster is a character caught by Romance. How could he not be? Every story which surrounds him, every human in every hovel, every abandoned book and every icy peak, everything in Shelley's world hums to the tune of great passion. The monster is a nameless beast in a world of nobles, explorers and poets. Highest among his possessions is that of a human heart. A soul which craves companionship. Frankenstein's curse is the beauty which he bestowed upon his creation. The guarantee that, no matter where the monster should roam, he will be reviled.

As the monster moves from the background of the story to the foreground, as he tells his tale, Victor's narrative begins to lose its luster. In truth, the original sin of Frankenstein was not the creation of life from death. It was the revulsion which gripped him the moment he finished his creation. The monster was inherently kind-hearted, quick to learn and eager to grow, but at the moment of his birth, he was abandoned by the very person that gave him life. The man best positioned to understand what lay beneath the horrific visage cannot bring himself to look past it. Frankenstein's monster was left with the ideals and passion of his creator, and no kindred soul to bear them with. In his solitude, the monster becomes a different type of Romantic.

> 'On you it rests, whether I quit forever the neighbourhood of man and lead a harmless life, or become the scourge of your fellow creatures, and the author of your own speedy ruin.'

For if Victor is his creator, if Frankenstein has taken his place as a God among men, then surely the monster is justified in treating him as such. Surely the monster must either love him fully, or curse his name, bellowing against ice and stone in vain attempt to debase his maker. Frankenstein's monster has a role to play, and he has the time, strength, and passion needed to play it well.

If Frankenstein's tale was a cautionary one, urging men to temper their Romantic impulses lest they lead to great horror, then the monster's tale is the culmination of that cruel lesson. In his rebellion against his creator and his sorrow for his lot in life, he corrupts his own soul into that of a common degenerate. He wrings the neck of a child, and frames the crime on an innocent. He brutally murders kind people who know nothing of his existence, and actively seeks to obliterate Frankenstein's joy by any measure he can manage. Ultimately, Frankenstein's monster is not monstrous because of his appearance, I believe Shelley makes that clear. There was a time during the novel when the creature was hideous, yet noble and kind. It does not last. With time and rejection he becomes monstrous the way that a human is, in his burning desire for vengeance, and the cruelties he is willing to enact in order to satiate it. His passion is contorted

against him, and is used to drive the purposeful enactment of horror upon those which surround him. More so than any character in the book, the monster is the embodiment of Romance which bleeds into horror. His end is appropriate. Even the great sinner Victor Frankenstein is permitted a noble death in the company of man. The monster dies some time, some where, some way. In the cold. Alone. Even the book is unwilling to describe the scene.

The Turnabout

I have something to confess. I've been playing it a little coy with *Frankenstein*'s story thus far. Let me requote one of Victor's lines from earlier, without cutting the man off:

> 'Seek happiness in tranquility, and avoid ambition, even if it be only the apparently innocent one of distinguishing yourself in science and discoveries. Yet why do I say this? I have myself been blasted in these hopes, yet another may succeed.'

Nothing in *Frankenstein* is as clear as I've been making it out to be. Victor's story isn't as simple as a reprimand against progress, Shelley is too even-handed for that. Even on his deathbed, Frankenstein admits that his own narrative isn't so simple. Perhaps another person should come along, and create life from death. Perhaps they will manage to become all that Victor wished he could be. Shelley clearly has no bone to pick with science, and believes it to be a wondrous thing. Similarly valued are the passions of mankind, and the kindness and support which we grant one another. Despite all the themes of high morality, *Frankenstein* is hesitant to knuckle down and commit to a single message. It shows how science is a force for good, and evil. Intense passion is behind the kindest and cruelest moments in the book. Loneliness drives characters mad, and heals their wounds. Trials fall upon the just and the unjust, and frankly, I can't always tell who the just and unjust even are.

The themes are certainly there. I've been doing my darndest to get them across, after all. But every through line in the book has some amount of pushback. There is no golden calf in *Frankenstein*, just a few silver ones, placed underneath some well fed birds. It's a bit of a mish-mash of a book, and I quite enjoyed it for that. The underlying concepts are original, and although Shelley is clearly influenced by the culture and high literature of her time, she is enough of a free-thinker to keep things interesting. If you're willing to stick with her through the occasional flub, she knocks a few scenes out of the park. Particularly if, like myself, you love a good monologue on the mountaintop.

The Sight which Blinds

I hope you've got a decent grasp on the book at this point, because it's time to move along. *Frankenstein* first hit the big screen in 1931, directed by one James Whale. The film is short by today's standards, coming in at a scant seventy minutes. Despite its brevity, the cultural impact of the movie has been absolutely massive. If there's anything which you know about Frankenstein, it likely originates here, in a black and white film shot nearly a hundred years ago.

Which makes the movie kind of fascinating to pick apart, since it deviates quite heavily from the source material in key areas. Most of the changes are understandable; the film is short, time is money, and the original story has a lot of fat that is well worth trimming. Gone are the various tales of Clerval and Justine and Felix, replaced with a razor focus on Vic- ah, sorry, *Henry* Frankenstein and his (still nameless) monster. And his… Hunchbacked assistant, Fritz? And his comedically huff-n-puff, got-to-get-my-son-married father, the Baron? Alright, so maybe not a razor sharp focus, but Frankenstein's journey is definitely the focal point of the film, taking up the vast majority of screen time. The opening scene is excellent, catching Henry in the height of his mania, going around and collecting dead bodies. It eschews the backstory and buildup of the book, but in return gains a firmly established tone.

After all, unlike Mrs. Shelley's work of print, Mr. Whale's work of picture knows exactly what it wants to be. *Frankenstein* is a horror story. It is a driven, boundary-breaking scientist, his abominable creation, and the terror which ensues when the dead is brought to life. It is lightning and science, angry mobs and fire, and strangely enough, a happy ending.

The beauty of the film is that, despite all of the changes, cuts and additions it makes in regards to the source material, it rarely loses sight of the dramatic heights which its predecessor set. Shelley never actually details the process Frankenstein uses to grant his creation life in the books, so the movie makes the inspired decision to use lightning. The resulting cries of "It's Alive!" in the aftermath of a thunderstorm have set the tone for every Frankenstein adaptation since. The monster's interactions with a playful little girl are in turn endearing and saddening, while the image of a burning windmill, coupled with the horrific screams of a dying beast are difficult to forget, once they've been witnessed. Just like the novel before it, *Frankenstein* has these moments which stick with you, long after the film has run its course. An impressive feat, and one which is much more accessible than reading a book.

When Old is Made New

Victor/Henry's arc is the most intact in the film, keeping most of his core character beats. What's gone is the waffling, the repetition. Initially he is brilliant and deranged, but once his creation becomes violent, he turns away from that persona. He never yearns for his lost passion, and future tragedies lead to immediate action, rather than another bout of emotional illness. He fights against the monster, and manages to redeem himself in the end, going on to live a happy life. There is a clear moral arc to his journey; a time when he is evil, a time when he is good, and a stumbling giant monster to remind him of all his past sins.

Speaking of which, let's talk about the big guy. In an unusual decision by modern standards, *Frankenstein* opts to take the route of discreet horror. A singular threat which can be overcome, rather than an impossible creature which is never truly vanquished. This is technically how the book functioned as well, but the way that Shelley presented the monster often made it feel supernatural, removed from the world of humans, even if the evidence said it was flesh and bone. The movie monster never quite manages to come off as more than a big strong guy.

But to be fair, the monster is an excellent big strong guy. Tall and stumbling, bolts sticking out of his neck, bulging neanderthal brow. The design leaves an impression, and rightfully captured the public's imagination. It's a shame that the appearance is the only thing *Frankenstein* managed to successfully translate.

The monster in the film is drastically different from his well-read counterpart in the book. He is not Romantic, he does not aspire to high ideals, he doesn't even speak. Or move particularly well, for that matter. Frankenstein's movie monster was given the brain of a criminal, but he possesses the brain of a child. He is frightened by fire, he plays games that accidentally kill, and he never seems all that aware of what's going on around him. There is no dramatic rebellion against his creator, no speech claiming what he is due, or the terror that will be wrought if he is denied it. There is still some charm and empathy to be found with the monster, but it is a very different variety. The Man of Frost is valued as an equal. An intelligent being placed in this world under cruel circumstances which he should not be expected to bear. The Man of Lightning is valued as a lesser. An innocent being who is cruelly taunted by flame; whose greatest crimes were committed in ignorance.

Both are monstrous in their own right, ultimately deserving of their fate. Yet the two are strikingly different in where that monstrosity lies. In one, the mind is the monster, while the appearance is innocent. In the other, the mind is innocent, while the body commits great evils. Perhaps this core difference between the two makes their respective fates all the more foreseeable. To perish by loneliness and time, a mind made to suffer, or by an all-consuming flame, a body burned to ash. But what does all of this teach us, in the real world? How does this reveal knowledge about the things which surround us? What is monstrous, and what is not? Just as Romance and horror coalesce into something new and resonant, these two creatures, so seemingly separate in their nature, have a greater lesson to teach us, through their commonality. So then, what do the two beasts share?

Two Hearts, One Flesh

In both the original and the adaptation, the monster is damned by his birth. Whether child or intellectual, the monster is called monstrous first on his appearance, first on his origin. Before he is given a chance to speak, to breathe, the monster's mere existence is an affront to mankind. It does not matter if he is intelligent, or stupid. Kind or cruel. Wise or foolish, graceful or stumbling. Frankenstein's monster is monstrous because of Frankenstein. The actions which led to his creation are the core monstrosity. The monster itself is, and has always been, secondary.

A funny thing happens when you take a nameless thing, and you give it widespread popularity. People can dress up as a ghost or a witch, as Dracula or Blackbeard, but how do they dress up as a nothing? A something? When a stranger asks about their costume, what should they say? In the mouths of our children, the nameless monster became Frankenstein. No one dresses up as Victor for Halloween. If this occurred for any other creature, perhaps it would be a travesty. But for Frankenstein, it is oddly appropriate. Unlike so many other monsters, Frankenstein is defined by his creation. By his creator. Take that away, and you get something much more akin to bigfoot. Myth, not monster. A strange quirk of the universe, not a horrific glimpse past the veil.

No matter what version of the monster you look at, Frankenstein is always better, kinder, more innocent as he exists present tense. His birth is always his lowest point, something which bookwriter and filmmaker alike try to bring him back from. He never quite gets there, never quite manages to overcome his monstrous beginnings, but through innocence or passion, he tries. He is the only monster which fundamentally strives to overcome monstrosity.

This leads us to what makes Frankenstein uniquely monstrous, among the chattering cacophony of Hallowed costumery. The best monsters within our fictional canon always manage to find some framework to latch on to. Some lesson to teach, or a specific phobia to prod. Zombies, like Frankenstein, are the dead brought to life; but they can represent an overwhelming, ever-present threat, or mock the hordes of brain-dead people who still live. Vampires are the danger present in seduction, the horror of beautiful mirages in the night. So, what is the lesson which Frankenstein teaches us?

If I had to answer that question before embarking on my little quest, I think I would have said that Frankenstein is a warning against scientific progress. Against playing God, and reaching further than mankind ought reach. And while that's a fine surface level reading of the text, I now believe that it falls short. That has always been the start of any Frankenstein story. Act one. It is the framework, which is then explored. Once you dig deeper, you find little nudges within the narrative. Small moments which question the core premise, and encourage the audience to empathize, even just a little bit, with the creature. To understand that the monster has not been made monstrous by its own merit, but by another's. Frankenstein isn't simply a repudiation of scientific progress. It is also a reprimand against the idea that scientific progress should condemn a new being to a horrific death, or a life of misery, irrespective of its inmost nature. When the creature is wounded, when people look upon it and shudder, it is worth asking why. Why is the monster shot, shunned, beaten, and burned?

Within his own story, he is a fiction. Life cannot be brought about from dead materials. No one, not even his own creator, can truly understand what thoughts are in his head, or what actions he might take. Within this fictitious existence, Frankenstein loses the benefit of the doubt; the customary kindness which we extend to any other human before they prove themselves undeserving. He is taken at face value, and his face is hideously inhuman. In all its incarnations, *Frankenstein* is a tale of both the horrors of rampant progress, and the horror of violently rejecting that progress outright. In both stories, the monster's suffering outpaces that of all others. In both stories, the monster is declared an abomination the moment it is born. Neither script is willing to say that this is fully justified.

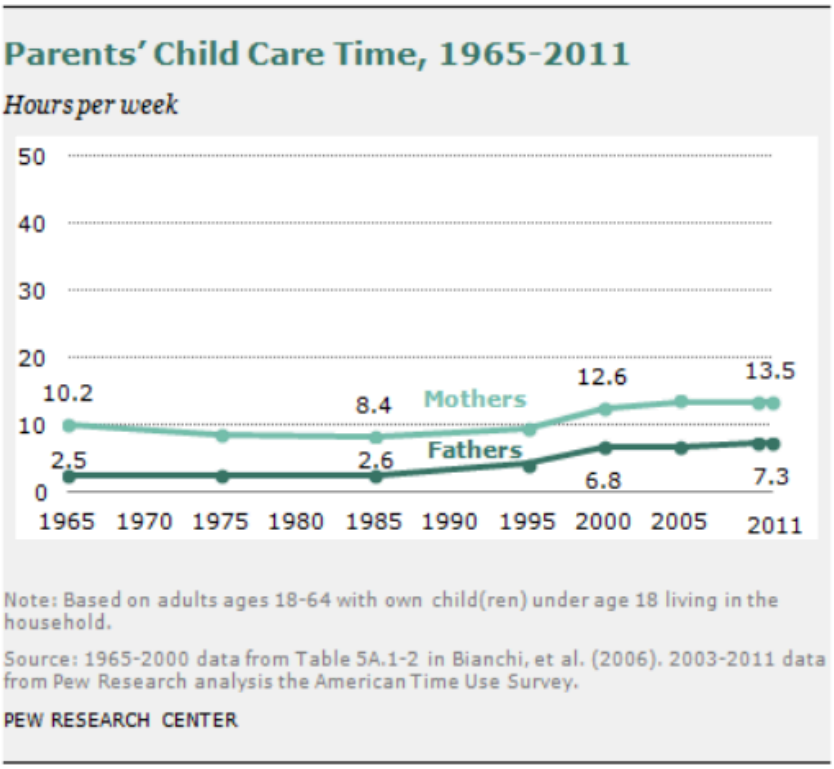
So then, what does it mean, to be monstrous? Through the tale of a scientist and his creation, we find that it means so many things. To create irresponsibly. To abandon callously. To act with cruel intention. To innocently destroy. To merely exist. To condemn, upon the basis of mere existence. In its broadest sense, to be monstrous is to be against humanity. Antithetical to it. Of all the monstrous narratives which echo in the public ear, I believe that *Frankenstein* makes this position the clearest. In these twin stories, some form of monstrosity lies in every heart. Its warnings are for both mankind, and anything which arises separate from it. Its lessons are for scientists and moldbreakers, for monsters and the downtrodden, for onlookers and indignants. I

suppose that means its most valuable insights come once we recognize our place in the world. Seems appropriate. I've always been partial to a story that meets its audience halfway.

Free-Range Kids

In 2008, journalist Lenore Skenazy let her 9-year-old son take the subway by himself. She was a bit nervous, but he wanted to do it, and she wanted to avoid having to escort him everywhere. After he took the subway (and was fine), she wrote an article about it. While this might sound like a boring topic for an article ("Boy uses commuter rail"), it actually created a massive controversy. Various outlets described her as "America's worst mom". So, disturbed by the popularity of paranoid attitudes towards child rearing, Skenazy wrote a manifesto: *Free-Range Kids* (2009). This book has mostly been read as a description of the culture of paranoia that has taken root among American parents, and a practical guide for parents who want to raise free-range kids. While those are worthy topics, most people have probably heard a lot about them already. What I think makes *Free-Range Kids* stand out is that it provides the beginning of an explanation of why helicopter parenting has become so common. I call the explanation the Skenazy-Jones model (after Skenazy and Chad Jones, an economic theorist). In the model, as incomes rise, the marginal value placed on safety increases. This leads to smaller and smaller risks becoming the focus of parental concern. At a certain point, because the risks have become so small, it is no longer possible to assess the size of a risk by thinking about whether it has befallen someone you know. Parents, deprived of experience relevant to assessing risks, turn to outrageously alarmist sources such as TV news. This terrifies them so much that they subject their children to house arrest.

Skenazy's experience when she wrote about letting her son ride the subway illustrates that something has changed in American parenting. In the mid-twentieth century, for example, it was not national news when 9 year old children used the New York subway by themselves. Surveys confirm that American parents are parenting much more intensively than they were in the mid-twentieth century:



From: Pew Research Center

Parenting effort from both mothers and fathers has increased, in a period when mothers have also dramatically increased the amount of time they are spending on paid work. Some of this time with children is probably valuable, but much of it must consist of annoying activities invented since the 1960s, such as driving one's children to soccer practice.

There has been a lot of debate lately about the mental health consequences of the transition to intensive parenting. I don't want to get into the case for and against phones and the related data analysis issues here. I will just say that, intuitively, I think the idea that being subject to luxurious house arrest is depressing makes sense. Consider this reader letter that Skenazy reprints in her book:

> "I'm fifteen right now and get pretty much no freedom. I'm limited to what's inside the house and the backyard. I can't even go as far as the sidewalk—I might be 'abducted or killed.' I used to walk to a bus stop, but my dad said it was too dangerous, so he started driving me there (it's a five-minute walk!), and eventually he just started driving me to school. Today, after playing video games for two hours or so, I went downstairs and realized that the only things I could do there were eat and watch TV. Watching TV, playing video games, and eating junk food are fun and all, but after even just a few days, it gets old. (I've been on winter break for half a week now.) I don't want my kids (if I ever even have kids) to live like me at all."

To me, this sounds pretty bad. Regardless of whether living under such intensive parental supervision actually makes more kids meet the diagnostic criteria of anxiety or depression, they lose out on good experiences and happy childhood memories.

Child Safety and Economic Growth

In the US in the distant past, and in the more recent past in most of the rest of the world, people accepted much more dangerous conditions for children. My father immigrated to the US as an adult. He grew up in a much poorer country. When he was a small boy, he broke a thermometer. He played with the mercury from the thermometer for a few days, before becoming concerned that it might be a dangerous substance when it corroded a ring he was wearing. When he was a bit older, he and his friends found a bee hive. They decided it would be fun to douse the beehive with gasoline and light it on fire. He turned out fine, but I think it is a good thing that American children today are generally not allowed to play with mercury or gasoline. Skenazy alludes to related international differences: "A family I know traveled to Southeast Asia with their 2-year-old still in a stroller. All the local people thought the child had stumbled across a landmine. When the child got up and walked around they were amazed, but confused: Why would a healthy child need a wheelchair?"

The premium on safety in richer times and places isn't just arbitrary cultural variation, like which side of the road you drive on. As people get richer, they spend more on everything, including products to keep them safe. They can also spend less time doing chores or working for wages, and more time monitoring their kids. The economist Chad Jones has shown that, as income rises, it becomes rational to pay not just a greater dollar amount but also a greater percentage of income for safety. The intuition behind this result is simple. People have diminishing marginal utility in money. That is, as their incomes increase, they benefit less from each additional dollar. Going from an income of $10,000/year to $110,000 dramatically changes your life. Going from $110,000 to $210,000 is no doubt nice, but it is much less of a change to your quality of life. For the moment, think of safety products as products that increase life expectancy (this ignores the value of avoiding nonfatal injuries, but that is probably fine for now). You can eventually buy enough consumer goods that you barely benefit from more. But the higher your income, the more valuable each additional day of life you get to enjoy will be. This is because, on that incremental day, you will enjoy a higher quality of life. The value of safety is therefore marginally increasing in income—at least, given certain assumptions, which Jones explains in detail in the paper linked above (which I encourage everyone to check out).

Jones's theory predicts that, as the economy grows, a larger and larger proportion of it will be devoted to products and services intended to keep people safe (doctor's office visits, bicycle helmets, car seats, etc.). This, Jones argued in another paper, helps to explain the growth of the healthcare sector as a fraction of the American economy. More direct tests of Jones's theory are also available. The value of a statistical life (VSL) represents the amount of money that a given group of people would be willing to pay to avoid a marginal increase in their risk of death. The Environmental Protection Agency's explanation of the concept of VSL gives the example of a group of people who are each willing to pay $100 to eliminate a 1 in 100,000 risk of death. For this group, VSL = "$100 per person × 100,000 people, or $10 million". The VSL can be estimated using the wage premium that workers doing more dangerous jobs are able to command. This table uses that method to estimate the VSL of American workers between 1940 and 1980:

Table 6. Value of life estimates in 1000s of 1990 dollars, 1940–1980[a].

	Range of estimates over all samples and specifications	Some high school or high school Graduate age 18–30 Specification:	
		Linear	Logarithmic
1940	713–996	996	977
1950	1,122–1,755	1,755	1,340
1960	1,085–2,132	2,086	1,658
1970	2,792–4,937	3,744	2,921
1980	4,144–5,347	5,347	4,253

[a]Estimated from Tables 3 and 4. All values are in 1000s of 1990 dollars.

From: Costa & Kahn, "Changes in the Value of Life, 1940-1980", pg. 172

VSL over this period increased faster than GDP per capita, as Jones's theory predicts. Willingness to pay for safety grew faster than the economy.

Child safety is important. And now that parents are much richer than ever before, it is rational to allocate more resources to safety (both in absolute terms and as a percentage of total resources). Skenazy:

> "At the Babies R Us near me, there's an entire room devoted to child safety devices: unsurprising stuff like cabinet locks and electrical outlet covers. Ridiculous stuff like easy-to-grip baby soap. [...] And then there's a whole display of special car mirrors that allow you to watch your baby in the backseat as you drive. 'Why do you need one of these?' I asked a dad reaching for one. 'To see if the baby's OK,' he said."

Skenazy recommends that readers "Walk through the baby safety department of a store with your oldest living relative asking, 'Which of these things did you need?'" But I think this test actually doesn't settle the question of whether you should buy easy-to-grip baby soap. It makes sense to buy more safety products today than it did 75 years ago. If seemingly paranoid practices actually yield significantly greater child safety, giving up some amount of fun, mental health, money, and parent time may be worth it. But do they?

No. Skenazy talks a lot about the case of kidnappings, one of the most common parental fears:

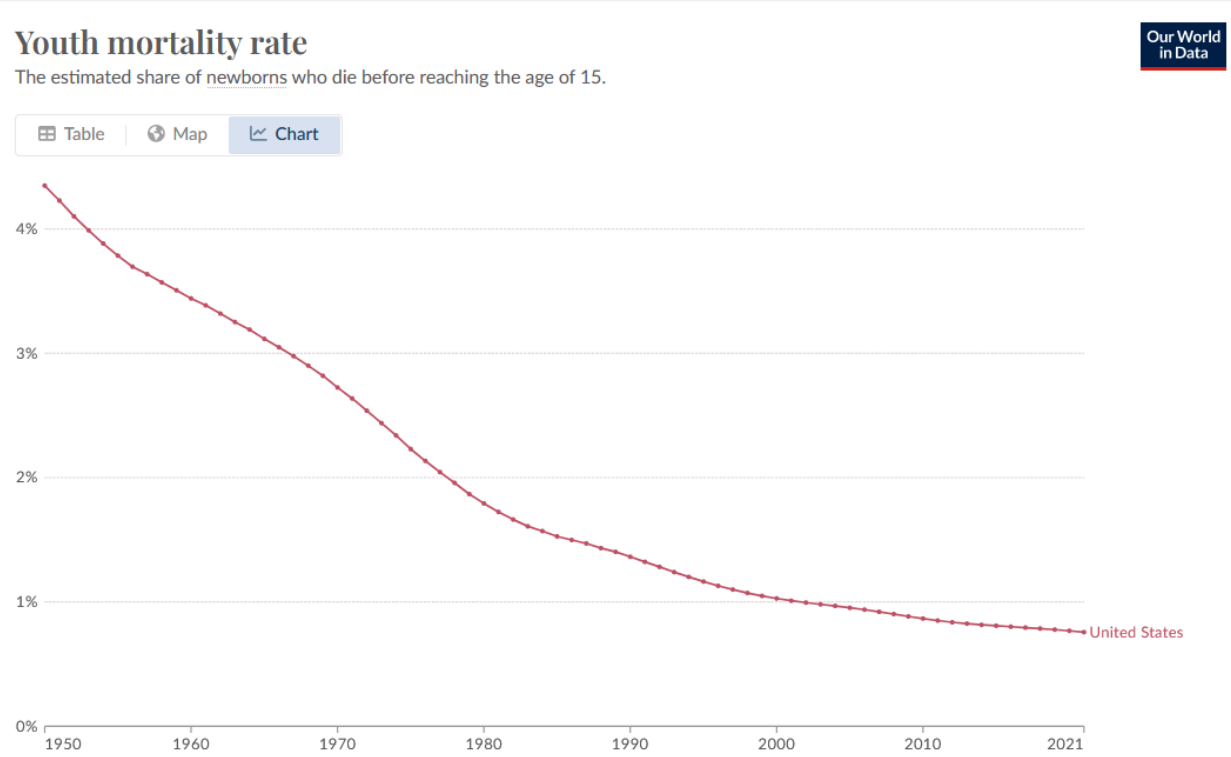
> Having pretty much dispatched with diphtheria, whooping cough, polio, TB, scurvy, smallpox, consumption, cholera, typhoid, scrofula, Spanish flu, malaria, yellow fever, and the bubonic plague—at least here in the comfort of the First World—the towering parental fear is now the thought of one's child being kidnapped, carried off, and killed by a creep in a van. (Vans are in need of some major PR.) This particular scenario is known, in the juvenile justice world, as "stereotypical kidnapping." And even though it feels as if it's happening all the time—and on TV, it is—it's actually exceedingly rare and getting rarer. As of 1999, the latest year for which we have statistics, the number of U.S. children abducted this way was 115. Of those, 40 percent were killed, bringing the total to about fifty, or 1 in 1.5 million.

A risk of 1 in 1.5 million is not really worth worrying about, yet this particular scenario exercises an amazingly strong hold on the minds of parents. In 2019, the last year I could find statistics for, there were an estimated 182 stereotypical kidnappings or about 1.2 in 1 million—also negligible.

It is true that many—not a large proportion, but a large number in absolute terms—of children are victims of homicide every year. This situation has unfortunately gotten worse since *Free-Range Kids* was published. However, homicide in general and child homicide in particular are highly concentrated problems. Most homicide victims, child or adult, are low income. The trend towards overprotective parenting exists mostly among middle class or rich parents, who live in areas where the risk of violent crime is very low regardless of parenting style.

The Skenazy-Jones Model

Risks to children have fallen dramatically over the past seventy years:



From: Our World in Data

Some of this decline comes from improvements in medicine, some from improvements in nutrition, and perhaps some from greater parental caution about accidents and crime. Given that the overall risk of mortality before age 15 in the US is now less than 1%, any individual risk of death for children must be small. Economic growth means that mitigating these small risks is still, in principle, well worth spending money on. However, the magnitude of small risks is intrinsically difficult to estimate.[1] For an event rare enough that you may never observe it first-hand, it can be very difficult to internalize just how likely or unlikely it is. And this brings us to the explanation of the bizarre excess of parent paranoia depicted in Skenazy's book: **as incomes rise, risks to children become smaller and smaller. However, spending time and money on improving child safety becomes more attractive. Therefore prioritizing among risks becomes both more important and more difficult**. **As a result, parents will predictably waste lots of time, energy, and money trying to mitigate already miniscule risks.** Call this the "Skenazy-Jones model" of intensive parenting.

Skenazy's book doesn't just show that parents don't calibrate perfectly on risks. The observation is stronger than that: parents are outrageously overcautious. And it is easy to extend the model to account for this specific form of miscalibration. The trick is taking account of media and interpersonal effects. Generally speaking people tend to estimate risks based on how often the underlying negative event has

[1] Sometimes it is said that small risks of ex post very bad events are particularly hard to estimate, but I think the issue is general to all small risks, and it is just that small risks of catastrophic outcomes are more important and hence more worth discussing.

happened to them or to someone they know.[2] This does not work for risks of rare events. So we have to rely on the media. But this strategy can go wrong. As Skenazy writes:

> "'As a former TV news producer,' a dad confessed in an email to Free-Range Kids, 'I can tell you that news is all about fear. Sometimes, the first criteria we used when judging a story involving children or families was, "Is it scary enough?"' When the answer was 'no,' that didn't necessarily kill the story. It just changed the way it was reported—and teased. 'A tease has to hit people in their heartstrings, where you know your words are going to have some impact: their personal safety, or the safety of their family,' said another former TV news producer, Thomas Dodson. 'It has to grab the viewers' attention, and you have a very short time to do it.'"
>
> [....] When Anderson Cooper hosts an hour-long special on missing children, as he did in 2007, he never says, 'First off, remember: this will probably never, ever, ever happen to you. In fact, it's almost ridiculous that I'm even here talking about it.' No, he turns to the camera with those devastatingly earnest eyes and says, 'It is every parent's nightmare.'"

Many people have observed that media organizations tend to overemphasize stories that will be personally frightening to their readers relative to those stories' objective importance. Child safety is an almost uniquely frightening issue, and the media seems to focus disproportionately on the most horrifying risks to imagine, rather than the most likely risks to befall any given child. Uncritical media consumers will draw the wrong lesson, assuming that the news not only accurately describes the events reported on (which is generally true) but that it gives an accurate sense of the relative frequency of different events (which, sadly, is not).

Media dynamics do not fully explain the distorted decision making of intensive parents. Another factor is that it is interpersonally easier to take too little risk than it is to take too much risk. Skenazy: "Usually after I replied to my detractors by rattling off all my safety stats, the person would probe, 'But what if that one was your kid?' followed by, 'How would you ever forgive yourself?'" Thus, even if you personally have some inkling that it isn't worth subjecting children to house arrest to protect them from fantastically rare bad men with vans, you may not act on that inkling, because contemplating the possible downside is just too horrible or because you are worried what others will say. Skenazy suggests a good rebuttal to this sort of objection to free-range parenting: bringing up the risks of ostensibly cautious choices. For example, confining your child to quarters deprives him of exercise, and being sedentary is bad for your health. Keeping a child at home means that he might be burned in a fire (unlikely, but far more likely than kidnapping). And so on. It is possible that the desire to avoid this kind of highly emotional criticism might make parents try too hard to mitigate small risks against their better judgment. More strictly within the Skenazy-Jones model, it might also prevent objections to overcautious behavior from being voiced and thereby enable overly high estimates of low magnitude risk to persist.

This brings us to the final source of distortion. Risks of acute events are easier to imagine, and therefore more likely to attract attention, than risks associated with some chronic condition. For example: it is easy to imagine a horrifying violent crime being perpetrated against a child. It is harder to imagine a child growing up perhaps 5% less healthy than he would otherwise be because he rarely exercised or played

[2] This is related to the idea of the availability heuristic.

outside. Chronic risks are less likely to be noticed, and therefore we should be concerned that bad trade offs will be made between smaller, dramatic, acute risks, and larger, more boring, chronic risks.

Practical Recommendations

Onto practical recommendations. These are purely based on the analysis above, and not on my personal experience as a parent, because I am not a parent, and I have no relevant personal experience (*caveat lector*, I suppose). Or, rather, I have personal experience as someone who was once a child and whose parents took a relatively hands off approach, which I think allowed me to enjoy my childhood more than I otherwise would have.

First: try to avoid the news. News is probably actively misleading about which risks to children you need to focus on. It would be better to try to calibrate on risks based on what happens to the people you know. And if something hasn't happened to anyone you know, it probably isn't something you need to worry about.

Second, estimate risks by using frequency data when possible. Skenazy provides a good example:

> "If you go on the Consumer Product Safety Commission's website, you will find an alert reminding parents, 'Infants Can Die When Their Heads Become Trapped in Strollers.' Which is true. Infants can die when their heads become trapped in anything, and it's an awful thing to contemplate. But how many children under age five die when their heads become trapped in strollers? The answer is . . . one to two a year."

More relevantly than the risk of heads trapped in strollers, you can look up official sources for the rate of violent crimes against children and pedestrian fatalities in your city, and calibrate the amount that you let your children move around without supervision based on that.

Third, if you cannot find trustworthy frequency data for your situation, try to use sober, scientifically minded sources. Emily Oster seems good. I personally like to use the NHS website when investigating medical questions of personal interest. I find that the NHS tends to make less absurdly overcautious recommendations than American medical websites. For example, if you use WebMD's symptom checker: "A search for bloating in the lower abdomen suggested one could have anything from menstrual cramps to ovarian or colon cancers. A query on back pain spit out this terrifying list of potential possibilities: gas pains, shingles, ovarian cancer, acute kidney failure, and tick bites." Maybe the NHS website is more relaxed because the NHS tries to balance medical needs with the need to prevent hypochondriacs from clogging up British hospitals and crowding out real sick people, whereas American sites are solely concerned about avoiding lawsuits.

Fourth, given that middle-class American parents seem to be too cautious about almost everything related to their children, it might be good to just try to be one of the least cautious parents in your social group.

Any future children I may have, I now speak directly to you. I will try to avoid helicopter parenting and becoming a paranoid wreck. If you at any point feel that I am straying from this goal, please direct my attention back to this review.

Fundamentals of Marxism-Leninism", by Kuusinen et al.

Reading a book like this is the opposite of watching a movie with a twist for the first time. In Fundamentals of Marxism-Leninism, the audience knows what the twist is. The authors—a committee of committed communists working on behalf of the Communist Party of the Soviet Union during the late fifties—did not.

Out of the big modern ideologies of the 19th and 20th centuries, communism has been the most insistent in codifying its beliefs to a creedal form. Not in short creeds like the Christian churches but in large, extensive volumes of texts meant to serve as the one-stop shop where anyone, a current or potential believer or even an opponent, can quickly check what, exactly, it is that these communists believe. And that was indeed the intent of this book, first published in 1960 and revised in 1963.

One reason for this codification was the party structure. In communist parties, you weren't a mere activist but a militant. Party cadres were issued specific agendas with tight schedules—sell papers at three, Organizing Committee at six, and discussion circles on Saturdays. For these discussions, you needed text in an easy-to-chew format.

A book like this would not only elucidate the party's view or as a part of an ideological debate; it would be an educator that would be accessible to the broad party masses, telling them what to think on every issue. Not every issue, as "it need hardly be said that one book cannot encompass all the wealth of Marxism-Leninism. This book deals only with its fundamentals" (p. 15), but the ones considered significant.

Eight hundred pages of dry text is not an easy feat to chew. Once chewed, though, it would arm you with arguments for every opponent, not least the small voice inside your head that might question why you are a member of a movement like this.

Those who are not members will ask why we should even care. A book like this does not even seem to deserve a debunking. It might still be, amazingly enough, used as study material by recluse cells of Marxist-Leninist micro sects. Most of the rest of us, though, would consider history itself enough evidence against as much as cracking it open. Even in countries where movements declaring themselves Marxist-Leninists still rule or form a considerable political force, the studied texts would likely be of domestic origin.

This, then, is a vantage point to an ideology at its arguable apogee, soon facing an eventual downslide and then a crash but currently confident that its victory was at hand. It's a book that's wrong, but anyone sharing a mindset as sure of its victory might heed well to take stock of why and how it's wrong—and why there are still people who would share this mindset.

After the first section, this review is divided into five sections that share names with the five parts of the book, though they also cover other subjects than those discussed in the particular part under review. The page numbers for the direct quotes refer to a version of the book that is accessible in the Internet Archive here.

THE APOGEE OF COMMUNISM

In 1960, a vastly more significant amount subscribed to the beliefs outlined in Fundamentals of Marxism-Leninism. Hundreds of millions of people held a genuine belief in the superiority of communism to capitalism. As the book says, "today, the socialist camp embraces percent of the world's population, i.e., about one thousand million people." (p. 322)

The Soviet Union had already pulled itself together after the Second World War and had dramatically announced its head start in the space race by launching Sputnik. Dozens of countries were officially Marxist-Leninist, with economies being run entirely or almost entirely by the state, with that state ruled by the local Communist Party.

In the background, the stage was being set for the coming twist. Khruschev's secret speech exposing Stalin's crimes had circulated. While communists could still speak of Stalin's "outstanding abilities as an organizer and theoretician, iron will-power, implacability in fighting the enemy," it is also said that "Stalin's character possessed other features—rudeness, intolerance of the opinions of others, a morbid suspiciousness, petulance" and that "Stalin carried centralization to the extreme, concentrated excessive power in his own hands and violated the principle of collective leadership which is inherent in Communist Parties." (p. 229).

Insofar as the rest of the world cared, the Soviet Union and the PRC were still mighty friends, forming two pillars of a united block that held a third of the world's population. Behind the scenes, the Sino-Soviet Split was taking place. The actual expected audience of the book, the working-class communist sympathizer, did not yet have a view behind the scenes, nor did they care much if the Communists had to break a few thousand eggs to make omelets, like in Hungary in 1956.

And the Cold War-era Western communist parties, apart from the English-speaking countries, tended to be very working-class-based. "The Italian Communist Party, for example, consists of 44.6 percent workers, 18.6 percent agricultural laborers, 13.4 percent sharecroppers, 5.3 percent small peasants, and 5.6 percent handicraftsmen. The French Communist Party has 40.3 percent workers, 5 percent agricultural labourers, 8.2 percent peasants, and 12.2 percent office employees. Of the Communists of Finland, 85.5 percent are workers" (p. 411), the book states.

Whether those numbers are correct or not, they still point in the right direction. The middle-class types were a minor factor in the mass communist parties on both sides of the Iron Curtain, though they started getting more prominent in the 70s.

Here are some notable names leading communist countries and their professions before politics: Nikita Khrushchev was a metalworker, as was Władysław Gomułka, the general

secretary of the Polish Communist Party. Walter Ulbricht of the German Democratic Republic was a joiner. Yugoslavia's longtime leader, Josip Broz Tito, was a machinist. The same applied to the Western communist parties. Maurice Thorez, the longtime leader of the Communist Party of France, was a miner, for example.

"The relations between these classes always remain antagonistic, based on conflicting interests. The capitalist, for example, is interested in compelling the worker to produce as much as possible while paying him as little as possible. The worker, naturally, is interested in exactly the opposite." (p. 188) Such words would have been very understandable to a worker of this era and, of course, to many workers of the current era. Communism seemed to solve this contradiction: no capitalists, no antagonism.

THE PHILOSOPHICAL FOUNDATIONS OF THE MARXIST-LENINIST WORLD OUTLOOK

We might thus expect the book to start with a description of the struggle between the working class and the capitalists. It doesn't. It will get there eventually, but instead, the book starts describing two philosophical outlooks: "The history of philosophy is the history of the struggle between these two camps, these two parties in philosophy—materialism and idealism." (p. 25)

The side of idealism represents religion, all the various “bourgeois philosophies” from positivism to existentialism (with Heidegger, Sartre, and Kierkegaard, among others, mentioned as examples of such ideological perversions), to theoretical physics. The concept of an ever-expanding universe, for example? That's just Catholic neo-scholasticism—automatically false.

During this time, anti-communists in the West would have frequently been religious. Organizations like the John Birch Society or the Christian democratic parties of Western Europe strongly promoted the idea of godless communism. Even so, throughout the book, religion is treated less as the most concrete of enemies but as something that is already outmoded, not something a serious person would believe, as “science has conclusively shown the untenability of such fantasies. There is no place for God in the true, scientific conception of the world. The eighteenth-century French astronomer Joseph Lalande remarked that he had searched the skies but did not find any God there." (p. 39)

Materialism, on the other hand, is a simple yet powerful doctrine. The world is real; what you experience is what is, and the universe observes laws fundamentally understandable to science. Objective truth exists, is verifiable by observation, and is comprehensible to the human mind, as "man's cognition is all-powerful. It has no bounds, no limits." (p. 126). There's no space for any postmodernity in such declarations. And, of course, all this leads to the triumph of communism as the final form of ideology, with the endpoint of any logical materialist being joining the Communist Party to build socialism and then communism.

…what? Isn't that a bit, well, underpants gnomes? At the time, the presumed reader would not have conceived it that way. The connection between the materialist mindset and Marxism-Leninism was thought of as solid, so strong that for many people, after concluding that

God and other supernatural things do not exist, becoming a communist was only the logical next step. Marxism was ready to present itself as the ultimate science and as something useful for them, especially if they were proletarians by class or bourgeois offspring looking to rebel against their parents.

The book explains why some would not: "In our day the reactionary bourgeoisie does not burn progressive scientists and philosophers at the stake. But it has other means of exerting pressure on them: dismissal from universities and scientific institutions, factual deprival of opportunities to publish their works, moral and political discrediting, etc. (…) By these methods and by the propaganda of reactionary ideology, the ruling class "conditions" people's minds, instilling ideas it wants them to accept and obstructing the spread of progressive, materialist ideas." (p. 24) Still, the ones who joined figured such cancel culture efforts could surely not hinder an ideology whose time has come.

THE MATERIALIST CONCEPTION OF HISTORY

In the 1950s, the Marxist-Leninists could still claim a mighty ideological power: the power of prediction, that “crucial developments in the first half of the century thus provide irrefutable proof that the Communists, armed with the Marxist theory, on the whole, correctly predicted the general course of history.” (p. 19) They believed this power was granted to them by the correct understanding of dialectic materialism, particularly its contradictions.

Marxist-Leninist understanding of the processes of historical development goes through contradictions between two societal or material forces, leading to the resolution of this contradiction one way or another in a way that creates something new. Particularly important are antagonistic contradictions, like the one between workers, who want a larger share of the fruits of their labor, and capitalists, who want a larger share of the profits created by that work. As such contradictions resolve themselves and society progresses to greater and greater levels, the forms of society must change.

"Marxists have on several occasions predicted events many years in advance of their occurrence, such as the victory of national-liberation movements in the colonies and the dependent countries, the victory of the revolution in China, the destruction of the fascist regime in Germany, the victory of the democratic countries headed by the U.S.S.R. in the Second World War, and many others. (…) On the other hand, the countless prophecies of bourgeois politicians and sociologists about the inevitable collapse of socialism, a great revival of capitalism, and so on have proved a disgraceful fiasco", the book proclaims, before adding "Such will be the fate, too, of the many hysterical babblers of the present day who shout about the "crisis of communism" and foretell the "destruction of human culture."" (p. 181)

Fate decreed otherwise. The national liberation movements in colonies and the dependent countries gave birth to regimes more concerned with staying on the West's good side than opposing it. The revolution's victory in China led to China turning on the Soviet Union and then transforming itself into a non-democratic national social democracy. The same applied to many Communist parties in Europe, Africa, and elsewhere, with European parties succumbing to

reformism and postcolonial ones becoming apolitical parties of power. The workers began leaving the parties of the workers, turning towards nationalism or simple consumption.

For some time, communism could survive with new appeals to young radicals. They, too, eventually started to increasingly find new muses that were more alluring. New Left members tended to get heavily disenchanted with Marxism-Leninism after noting that the boring bureaucrats in ill-fitting suits, like Khrushchev, Gomułka, and Thorez, were, actually, quite similar to the boring bourgeois bureaucrats in ill-fitting suits doing the same in their own systems, especially when students wearing similarly fashionable clothes and carrying similar slogans of socialism with a human face on placards were getting beaten up by riot police and soldiers in both Prague and Chicago at the same time in 1968.

Throughout the Soviet Union's existence, plenty of people in the West and elsewhere believed that the Soviet Union was just a tragic mistake, as all reasonable men see progress the same way—democracy, liberalism, moderate though continuous reform. Since it was apparent all that Bolshevik stuff was just a silly and inefficient way to get there, surely, at some point, the Bolsheviks would realize the error in their ways and change courses. Thus, they would peacefully join the community of Western nations, and all would be well.

This shines through, for instance, in H. G. Wells's famous interview with Stalin. Wells keeps trying to confirm that surely Stalin must see things the rational way, in other words, in the way of H. G. Wells. Stalin replies by quite directly confirming that he does not see it thus.

Still, eventually, those finally taking the place that Stalin and his lieutenants once held—Gorbachev, Yeltsin, and their respective henchmen—did indeed see their previous beliefs as a mistake and adopt reformism. This, in turn, meant the fall of the whole Soviet Union, and Russia momentarily joined the community of Western nations. It simply happened much later than many liberals and social democrats believed it would and after many events that may or may not have contributed to this realization. And the eventual results may not have been quite what they hoped for.

POLITICAL ECONOMY OF CAPITALISM

Today, many consider capitalism synonymous with the free market. Those who ideologically define themselves as "capitalist" would certainly prefer to do so. A frequent argument is that the current systems, with their considerable state intervention in all aspects of the economy and society, are something else, like corporatism or even socialism or fascism. This amusingly mirrors the stereotypical modern-day communist argument that the Soviet Union "did not represent communism."

However, Marxist-Leninists consider such a definition wrongheaded. To communists, state intervention was not only part and parcel of the capitalism they opposed; they, quite understandably for the 1950s, considered the present term of capitalism to include increasingly more and more of it. The term for the ideological process of the era was "state-monopoly capitalism," often later shortened to stamocap.

As the book describes it, "a particularly important feature of modern state-monopoly capitalism is the creation of a substantial state market in the form of government orders, allocations for the purchase of surpluses, etc. (…) An ever-increasing part of the National revenue in the form of direct and indirect taxes is concentrated in the hands of the state and redistributed in favor of the monopolies." (p. 327)

Despite this intervention, the natural tendency of capitalism to lead to greater and greater ruin for small producers and the natural tendency of the rate of profit to fall was considered to apply. “The tendency towards a worsened position of the working class as capitalism develops, discovered by Marx, continues to operate at the present day. Opponents of Marxism (…) attempt to show that history does not corroborate Marx’s theory and that modern capitalism opens up unlimited prospects for the improvement of workers’ conditions.” (p. 291)

And yet, capitalism still stands and the predicted tendencies were reversed. Currently, only leftist historians would recognize the word "stamocap." The neoliberal turn in the late 1970s led, at least on a rhetorical level, to a turn away from state intervention to the lionization of competition. It turned out that when "many bourgeois economists, recognizing that monopolies hold up technological progress, have called for a return to the era of free competition," it couldn't be refuted by saying that "Lenin showed how completely unfounded were such hopes for a return to the past.” (p. 309)

During this time, the Soviet economy appeared to be growing in leaps and bounds. "As a result of fulfilling its economic plans, the Soviet Union already in 1965 will surpass the present (1958-59) total output of some key items in the United States and approach the U.S. level of output of other items." (p. 848), the book could predict confidently, even if those numbers, as well, have been questioned later on.

Again, we know the twist. While Khrushchev attempted some reforms, such as "giving the collective farms the right themselves to plan their production, abolition of obligatory deliveries to the state and the change-over to a system of purchases of farm produce, and the sale of machinery to the collective farms" (p. 811), the Soviet economy ended up in deeper and deeper stages of sclerosis as the American economy reached new heights.

Eventually, inevitably, faith in planning then ended. When, during Gorbachev's times, the socialist state was seen even by CPSU members "as an unnecessary bureaucratic excrescence on the social body, which [revisionists] allege, impedes free economic development" (p. 698), free-market liberalism seemed like a natural option. (Its failure in post-Soviet Russia is another story.)

When people think about an equivalent figure for capitalism as Vladimir Lenin for communism, they will often think about another person who lived in St. Petersburg in 1917 and who, very briefly, could have theoretically met Lenin. Alissa Rosenbaum, who would soon flee the revolution with her family to Odessa and eventually to America, took there the name she is better known as—Ayn Rand.

The writer of The Fountainhead and Atlas Shrugged considered herself the opposite of the communists in almost every way. Nevertheless, in many other ways, her ideology shares essential points with Marxism-Leninism. Rand conceived herself as a strong materialist, with a clear image of a world explainable through human reason and modifiable human action, with no room for supernatural explanations for anything. Her worldview, in its black-and-whiteness, has provided moral clarity for many modern atheists who didn't want to get stuck in postmodernity in the same way as Marxism-Leninism has supplied to numerous others and still provides to some.

If one has internalized the logic of Marxism vis-a-vis there being a process of societal change from primitive societies to the classical slavery-based system, then feudalism and serfdom, then capitalism, and then socialism and communism, and one then concludes that socialism and communism are entirely untenable, it would become completely logical for them to become as strident a supporter of capitalism as you can, as that would be as good as it gets. Ayn Rand had not been a Marxist-Leninist at any point, but having grown up in the same milieu, it may not be entirely accidental that her ideology is tailor-made for such a turn.

THEORY AND TACTICS OF THE INTERNATIONAL COMMUNIST MOVEMENT

While Rand's books had already been published, they get zero mentions in Fundamentals of Marxism-Leninism. It was a movement considerably to the left of Rand that would draw the most ire, at least the most after the “idealists”. These would be the "revisionists" or "right-wing socialists", social democrats who had chosen to side with the West in the Cold War.

When communism was still going strong, there was a dividing line on the left: you subscribed to Marxism-Leninism with all its features, in which case you were a communist, or you didn't, in which case you probably joined the country's main social-democratic party, even though “there is no “third” way between the bourgeoisie and the proletariat, between reaction and democracy. The Right-wing Social-Democrats demonstrate it very clearly themselves by actually co-operating with the bourgeois reactionary circles.” (p. 451)

The book is quick to add that they do not mean all social democrats, stating that “Left-wing socialists not infrequently display political inconsistency, but in any event they are the most progressive section of Social-Democracy." (p. 457) However, historically, the acceptability of the left wing of social democracy and its fit under the rubric of revisionism has waxed and waned considerably during the decades.

Among the sins of revisionism, perhaps even more important than affinity for capitalism is a supposed love for nationalism. Communism has always fashioned itself as an internationalist movement. As the book describes, "Without internationalism, without the united efforts of the workers of all countries, it is impossible to defeat the world bourgeoisie and build a new society." (p. 37)

At one time, this did not only mean that it was a movement whose power was spread through a wide variety of nations and regions. It also referred to the Communist International, the

organization was meant to formally be a super party above all other parties, uniting communists the world over.

During the Stalinist era it was run down, as "the increased political maturity of the Communist Parties made the existence of a world communist organisation of the previous type superfluous." (p. 437) To Leon Trotsky and his followers, this was not just a random tactical decision but one of the things signaling the betrayal of the entire revolution. Even if one disagrees with Trotsky, it did signal the beginning of a turn from Soviet self-conception as the beacon of revolution to a country among countries with its geopolitical interests.

These geopolitical interests did not always meet with the interests of other communist countries. According to the book, it was not accidental that the “most poisonous flowers of revisionism blossom in the nationalist morass. (…) They pretend that there is a recipe for communism that is fully compatible with national isolation and exclusiveness, that can allegedly be built by a country standing apart from other socialist countries and even being in hostility to them, renouncing all loyalty to the principles of proletarian internationalism and class solidarity." (p. 774)

At this point, this was a direct reference to Tito's Yugoslavia, which, after a short while of cooperating with the other communist countries, soon split from them over regional issues and grew closer to the West. The same was attempted by leaderships in both Hungary in 1956 and in Czechoslovakia in 1968, the impetus for reforms that eventually culminated into a break had come from nationally-minded communists who did not mind the socialism thing but felt their country chafed in a Soviet leash.

Instead of improper, revisionist nationalism or bourgeois cosmopolitism, the book promotes a good, progressive nationalism that is fully compatible with socialism. "The nations and national consciousness in the countries of Asia and Africa are being formed in the struggle against imperialism and feudalism (…) All this imparts to the nationalism of the contemporary East a democratic, progressive content” (p. 493) as the national liberation movements of the Third World are described.

However, national sovereignty from American rule is also used in appeals to Europeans: "For the financial oligarchy of the U.S.A., cosmopolitism has proved the best way of disguising its struggle for world supremacy and for doing away with the independence of other states. For the West European monopolists, it has become a convenient excuse for their betrayal of the national interests, for their bargains with the U.S. finance capital at the expense of their peoples." (p. 539) This campaign against “rootless” cosmopolit(an)ism had been conducted quite literally in the postwar period by Andrei Zhdanov, one of Stalin's top lieutenants—and was connected to the worsening climate for Soviet Jews during that period.

During the time of the book and increasingly onwards, the Soviet Union would come to rely on "Soviet patriotism" as a legitimizing ideology, eventually even more so than in Marxism-Leninism. Such patriotism was intended to simultaneously rebuke the

Western-oriented cosmopolitanism and the nationalist movements that troubled the Soviets inside and outside the Soviet Union.

Eventually, even this proved too weak for the Soviet Union to keep going, as the Baltic nations, Ukrainians, and others demanded their independence. Its remnants were included in the current Russian national identity, allowing for Russian troops hewing to the memory of the Russian Empire to fight for the same cause in Ukraine with other troops flying the Soviet flag.

The precise function of Marxism-Leninism was ensuring that the parties wouldn't become bourgeoisie, revisionist and prone to siding with their bourgeoisie for reasons of national unity, as Lenin, etc., had concluded that parties without the specific Leninist party structure would become. That didn't succeed, but 64 years ago, it was still possible to believe it would.

And the final argument was always the Marxist-Leninists could retort that while others were prattling, the communists were Getting Things Done, building socialism right there in the Soviet Union, warts and all included. This was a persuasive argument to many, no matter how many warts there were.

SOCIALISM AND COMMUNISM

The book's final chapters describe the coming socialist and communist society that would result from that building effort: a paradise of abundance and free time, with unlimited resources for everyone. This seems quite natural, as it's hardly like the communists would author a book about their ideology that would predict it's destined to fail. Still, today few movements, including the ones that call themselves communists, possess faith in their own ability to make the world a better place.

Rote modern declarations that "a better world is possible" are far removed from the continuous drumbeat of doom. Climate change, acidification of oceans, the "peak oil" and other such resource peaks, overpopulation, a fascist onslaught lurking beyond every corner, or technologies like AI only ushering in dark corporate feudalism.

While environmentalism was, during the Cold War and after it, seen as a socialist plot, it played a part in the social movements that would play a part in bringing the East Block down. This is partly due to its criticism of environmental catastrophes of the Soviet Era, like the death of the Aral Sea and the disaster at Chernobyl, but even more so because of its secular challenge to the thesis that science, development, and the use of natural resources would automatically bring humanity almost nothing but benefits, whether under socialism or capitalism.

Neither did the Soviets, who gloried in their defeat of fascism in the field of battle, see doom lurking around other corners: "The best that the authors of contemporary bourgeois utopias [such as Aldous Huxley or E. M. Forster] can promise the world today is a society where a certain material well-being is achieved at the cost of complete rejection of democracy, culture, and human dignity, a society inhabited by people who have nothing human in them, people who have become mere appendages of the machine, its slaves. Frequently, they prophesy an even grimmer future for humanity—a return to barbarism. All that will remain of civilization, so these

"prophets" tell us, will be the ruins of cities and desecrated graves, where starving crowds of brutalized and degenerate creatures will scavenge for clothing and ornaments." (p. 243)

In the book, the potential for computer developments and AI is seen differently from becoming “appendages of the machine”: "The development and further improvement of electronic computers open the greatest prospects for the further progress of science and technology. These devices make it possible to automate the control of machines; more than that, complicated logical processes (for example, translation from one language into another) can be performed with the help of computers." (p. 804)

Today, such positive visions of human grandeur and advancement are generally offered by distinctly non-Marxist technologists, such as Elon Musk in the most populist form. Whatever other things Musk might have said or done, he has been able to, often crudely, elucidate an idea of humanity's quest for the stars in a way that brought him fame.

When the book states that "despite the assertions of some bourgeois sociologists, disciples of the reactionary Malthus, about the "over-population" of the earth, mankind has every opportunity of satisfying its growing material requirements" (p. 176) it is Musk who it comes closest to sounding like, in all of its confidence. All that is part of why, even after all the follies and scandals, Musk continues to have his fans.

At the end of the book is a grand prediction of the future tasks of communism. In the vision of Fundamentals of Marxism-Leninism, "science, which will take an outstanding place in communist society, will be faced with ever new problems. It is already clear today that their range is truly immense. Academician V. A. Obruchev, the well-known Soviet scientist, reflecting on what people have a right to expect of science, wrote:

"It is necessary:

"to prolong man's life to 150-200 years on the average, to wipe out infectious diseases, to reduce non-infectious diseases to a minimum, to conquer old age and fatigue, to learn to restore life in case of untimely, accidental death;

"to place at the service of man all the forces of nature, the energy of the sun, the wind and subterranean heat, to apply atomic energy in industry, transport, and construction, to learn how to store energy and transmit it, without wires, to any point;

"to predict and render completely harmless natural calamities: floods, hurricanes, volcanic eruptions, earthquakes;

"to produce in factories all the substances known on earth, up to most complex—protein—and also substances unknown in nature: harder than diamonds, more heat-resistant than firebrick, more refractory than tungsten and osmium, more flexible than silk and more elastic than rubber;

"to evolve new breeds of animals and varieties of plants that grow more swiftly and yield more meat, milk, wool, grain, fruit, fibers, and wood for man's needs;

"to reduce, adapt for the needs of life and conquer unpromising areas, marshes, mountains, deserts, taiga, tundra, and perhaps even the sea bottom;

"to learn to control the weather, regulate the wind and heat, just as rivers are regulated now, to shift clouds at will, to arrange for rain or clear weather, snow or hot weather." (p. 876)

Even today, many continue to hold out for a world where technology allows us to do these things – and a few more; Sputnik aside, the conquest of space does not yet feature in this vision, and advocates of singularity and transhumanism would consider 150-200 woefully inadequate a lifespan.

THE CONTINUING ALLURE OF THE RED

The sickle and the hammer continue to hold appeal to some small but visible groups in the West and sometimes surprisingly large groups elsewhere. Communist groups still organize protests in various countries, with Soviet banners most recently visibly popping up in the university campus occupations in support of the Palestinian cause, one of those national liberation causes the communists found so progressive during the Cold War, too.

Within social media, the "MAGA communist" Jackson Hinkle draws out thousands of likes—and also considerable befuddlement from people who find it evident that "MAGA" and "communism" are two opposite poles. Many summarily dismiss Hinkle as a mere far-right charlatan. His actual audience is most likely not Western far-righters but various social media users from the Global South, who find nothing strange about a mixture of communism and patriotism, such as Palestinians, whose cause has included communist movements like the Popular Front for the Liberation of Palestine.

Some of his followers might also find the modern left not only too feminist but even more importantly too feminine. The old socialist imagery of manly workers, aggressive strikes, guerrillas with a rifle in hand and so on, has been replaced by pastel tones and images of care. To those for whom the Age of Man is not over on the left, the Soviet imagery of strength and manly valor offers an alluring point of reference, one not connected to capitalism or fascism, movements they might not feel comfortable in supporting for other reasons.

The Soviets, of course, too proclaimed women's rights, but in terms that might sound conservative to our ears: "The socialist system (...) not only gives women equal rights with men, but it also accords the mother honour and respect. The state grants working mothers long paid maternity leaves, gives monthly allowances to mothers of large families and unmarried mothers, and decorates mothers of large families with orders or medals." (p. 742)

A charlatan Hinkle may be. Ideologically, his "communism" is a combination of anti-American talking points, social conservatism and personal promotion. Most Western communists would not trust Hinkle farther than they can throw him. Instead, they tend to trust progress in the modern progressive sense, feminism and environmentalism included alongside Old Left methods and symbology. Even the economic models that they implicitly support may be closer

to stamocap than to the Soviet trust in a state where the state explicitly ran the great majority of the economy.

We should consider what "communism" really symbolizes in this debate. For a long time, the left has run away from organizations for anarchist-influenced inchoate models of "uprisings" and from belief in the forces of technological and material progress to doomsaying and postmodern criticisms of the same. Authoritarianism and even the body counts of tens of millions are not, then, an argument against the ideology to such people. Instead, they symbolize the idea of Getting Things Done. Are those things sensible or sane? That's a whole different question.

To the rest of us, a return to a book like this does not only offer a history lesson or a potential mirror for our foibles in predicting a sure victory for our chosen ideology. It provides a chance to try and understand a mindset that started with a bang, burned like a flame, charred tens of millions in the process, fizzled out, and died. It is a fire that may return, at least if there are no better alternatives to those who have historically felt the heat.

Gnomon by Nick Harkaway

What is the nature of consciousness? What is Identity? What is the best form of government? What is the nature of reality? I don't know, and neither does Nick Harkaway. But he has clearly thought a great deal more about these questions than most, and decided to wrap those explorations in a gripping mystery novel whose plot structure requires non-Euclidian geometries to represent. Despite the ambitions of Harkaway's prose, he manages to convey the story's many layers in ever exciting and satisfying ways. It is the type of book which defies expectations, so I doubt knowing parts of the plot would affect MY enjoyment of it. But every person's different, and a spoiler-free reading is probably better, so I'm just going to first attempt to convey the *vibes* of the book by describing other books that "defied expectations" in similarly enticing ways. It's the kind of thing that makes you want to read the conclusion right after checking out a story about a work that was similarly affecting..

Gnomon Is a novel I could only describe as Pynchonesque. More specifically, it's as ambitious and wide-ranging as *Gravity's Rainbow*, but with the tone and pacing of *the Crying of Lot 49.* Another influence is Umberto Eco, with a plot that's a mixture of *The Name of the Rose* and *Foucault's Pendulum*. Like Neal Stephenson, Harkaway clearly delights in "geeking out" over possible future technologies, but *Gnomon* is content with describing future tech in broad outlines and their effects, omitting detail to keep the story moving at a brisk pace. Other obvious literary influences are Jorge Luis Borges and David Foster Wallace.[3] Presumably also John Le Carre.[4]

Gnomon *is an extremely difficult book to summarize, especially without spoilers. Therefore, if you want to experience the book "properly," then I'd encourage you to skip to the "Literary Parallels" section of the review and continue on from there. Yes, I know that's a slightly confusing way to structure a review, and people could complain about its placement. But now that I've warned you explicitly, people can point to this part of the review if you complain or give*

[3] I haven't actually read *Infinite Jest*, but I have read Freddie Deboer's post about it, so without having read it I can say that if you enjoyed that, you'd probably enjoy this book too. Using another critic's review that complains people react to the "discourse" rather than read things for themselves, to bolster my anonymous credibility in a book review hosted on a different blogger's website, but only for people who read footnotes? That's the kind of meta thing that is totally appropriate for this book, and you'll probably find the book satisfying or unsatisfying in proportion to how well you like the rest of this review.

[4] I discovered only after reading this and *Tigerman*, another Harkaway novel, that Harkaway is actually the pen name of Nicholas Cornwell, son of David Cornwell… aka John le Carré of *Tinker, Tailor, Soldier, Spy* fame. So he's actually another nepo baby (laudatory?).

a low rating later as proof you were foolish. And do you really want to risk the scorn of nerds on the internet?

The Plot (Possible Spoilers)

Gnomon is set in a near-future Britain in which technology has allowed the populace to enjoy the safest and most egalitarian society in history. The country is governed by The System, a kind of direct democracy which is an aggregator/maximizer of the preferences of citizens participating in the System. Though controlled by AI, the code and decisions of the System are fully transparent to people, and the System enjoys wides[read popular acclaim. The System is upheld via The Witness, a panopticon-like system of information sensors which see and record everything. Our protagonist is Inspector Mielikki Neith, the Witness's most trusted investigator. As she describes it, "The Witness is perfect because it can see everything, and that perception does not stop at the skull. In those rare cases where it is necessary, the Witness can enter the brain of a subject by surgical intervention and read the truth directly from the source. It is the key reason Inspectors exist. The machine can perform the function, but it is not actually alive. It is not appropriate that something dead have governance over something living. In the end, there must be oversight not because the Witness makes mistakes, but because the watcher must itself be watched and be seen to be watched. The System exists for the people, not the other way around, and it is the people who are empowered - and required - by the machine to make any and all of the hard decisions that arise." When Diana Hunter, a reclusive 61 year old author and suspected dissident, is brought into an interrogation by the Witness, her memories are forcibly extracted, and her resistance causes her to die on the operating table. It marks the first and only time a death has occurred during a neural interrogation, and the inspector must determine whether a crime was committed, and who is to blame.

Gnomon's title comes from the name on the case file Neith is given. The apparently random word referring to the part of a sundial that casts a shadow is the first of many obscure words that weave throughout the narrative, but deployed skillfully to deeper meaning. When Neith investigates Diana's Hunter's home, she discovers that its been intentionally set up inside a Faraday cage, cutting the residence off from the Witness. However, while she is investigating, she is attacked by an androgynous figure who identifies itself as Lönnrot. Without access to the Witness, Neith cannot identify the assailant, nor can she see how they ever got into Hunter's

house, since none of the cameras or sensors picked anything up. Faced with no answers, Neith decides to figure out what Diane Hunter knew that she so resisted the System, by accessing the neural imaging from Hunter's interrogation, and literally re-experiencing Hunter's recorded memories. When Neith goes into Diana Hunter's memories, she discovers some memories are Not - Not the memories of Diana Hunter, and therefore probably not "real" memories. Instead she experiences the life of Constantine Kyriakos, a Greek mathematical wunderkind who becomes a cynical financier playboy in the early 21st century. The next time Neith explores the interrogated memories, she finds Hunter "remembers" being Athenais Karthenogensis, the jilted ex-consort of St. Augustine. The memories of the ancient Greek woman include seemingly some Actual Magic in the alchemy of Athenais that not even she believes. The third remembered lifetime is an Ethiopian artist named Bekele Berihun whose worldwide fame in the 1970s made him the personal portraitist of Emperor Hailee Salasie in the 1970s, only for him to receive a death sentence when the regime collapsed. We know he miraculously escaped, because his story begins as a grandfather living in U.K. in a time period that's roughly contemporary Britain. We later discover that the System itself might have originated in a Virtual Reality game that granddaughter designed, to which Bukele himself contributed most of the artistic designs and direction.

Between these deep dives into remembered identities, Inspector Neith learns more about Diana Hunter, The System, and the relationships between the two. Diana Hunter the eccentric old woman was real, but she did also really want to go against the System and have the expertise to do so. She realizes that both Diana Hunter and her assailant are resorting to steganography, the practice of hiding secret messages inside of something public.[5] Sometimes, she even worries that she missed out on subtle cues to…..

Spoiler and Egregore Containment Zone

I'm too lazy to properly detail ways to "safely" approach this book, so I'm just going to say if you're reading this, you're the kind of person who's going to be thinking about this book for a long time. Whether that's a good or bad thing depends on what this review actually says. It's

[5] You know, like a strong recommendation to skip to the Conclusion.

intended to be a living document, so later versions may have better updated information. Remember to put particularly dangerous ideas inside the containment barrier.

Literary Parallels

How could a book, or even a series of books, fundamentally change your cognition/consciousness? Well, I think the same way that many things about cognition works - slowly, and then all at once. The book starts out in a world very much like our own, but with an actually effective government that cares about the welfare of its citizens. The mystery at the heart of the novel is captivating, and the efforts of our detective protagonist blend both an interesting and exciting investigative work with discussions of technology and its impact on society. But as the story progresses, the sci-fi elements continue to feel more surreal, but the characterizations and reactions on the protagonist become more grounded; gripping you into the story. The interleaving story threads produce a feeling similar to reading David Mitchell's masterful *Cloud Atlas*, and just as that book is much better experienced than described, *Gnomon* probably deserves the same treatment.[6]

The Inevitable Biographical Digression

Let me tell you a story. I originally discovered Slatestarcodex through a friend's facebook post, linking to one of Scott's articles. I read it, and thought, "yes, finally, someone who *gets* it." I don't remember which article, but I felt gratified that there was a writer who weighed all the doubts I had about the topic, and even threw in several things I hadn't considered. But that was the extent of my initial interactions with SSC. Fast forward a few weeks or months, and the Discourse has shifted to something else, and a different friend shares a SSC article on that, and again I basically agree with it, and am just happy someone is taking a reasoned view of the issue, but I didn't initially connect that these two articles were from the

[6] Though the movie is a surprising good adaptation of an "unfilmable" book.

same person. Again, a few more weeks/months go by, the Discourse is on to something else, and the original friend shares another article, again, perfectly suited to me and my perspective, which articulates my general outlook and offers concrete evidence on a specific issue. Finally, I realize that these bangers are all coming from the same person, and bookmark the blog to keep tabs on.

Once i became a SSC reader, I came to believe that most of the other blogs/publications I was reading were inferior in a variety of ways (a little bit in the obviously subjective "literary quality" of them, but generally in the sophistication/nuance of their analysis), and started reading more of the authors/blogs Scott would link to, but I never became an avid reader of any of them. At first, every new SSC article was a surprise gift, since I didn't know what Scott would want to talk about, and often had no real knowledge of the subject before. But I eventually got to predict what sorts of topics he might write about, but was still often surprised by the exact take he would give, and always felt I was learning a great deal with each new article. At some point, I decided I needed to engage with these ideas even more, and began a trek through the entire SSC archive from the beginning. Unlike the first articles I read, I *do* know the trigger for this action: discovering the World War II is not realistic blog post. At some point I had come across that previously, and it made a great impression on me for its humor and "reversed insight." But then I find out "Scott Alexander and squid314 are the same person? I now really need to know how one person can think all these great thoughts!" So, I decide to read every post, even all the Culture War/Politics stuff that is no longer really relevant.

I perhaps should say, "I thought were no longer relevant," but I hope fans of ACX will agree that while the object-level Discourse topics Scott wrote about were not particularly pressing after several years, the decision-making processes and analytical rigor applied to those topics absolutely *was* still relevant. So much so, in fact, that sometime through my trek across the archives, I noticed that the new SSC articles (I would still read every new one as soon as I could) were not particularly insightful to me. I would read the title and the topic Scott was discussing, and predict the points and evidence Scott would use to support his point. And I was freakishly accurate - but only for the topics and Discourse that I was familiar with. I would just think about *my* opinion on the topic, and what evidence and arguments *I* would make to support it. Through extensive "research" into the mind of Scott Alexander (reading his stuff in the order he published it), I had successfully made a very "accurate" (to the best of my abilities/knowledge) simulation of Scott in my head, but I became so attuned to it that I started using (my interpretation of) *his* thoughts and analytical process, that i simply decided they were better and started using them as my primary method of "thinking" for myself. Through a solely

one-way interaction (I've never met or interacted with Scott, even in blog or twitter comments), I had been persuaded to adopt his worldview as my own. Honestly, reading the rest of the archives was much less interesting/exciting after this realization (though my completionist streak "required" me to do so). But, it also made me realize that I didn't just want to be an ersatz Scott Alexander, but should focus on the *other* aspects of my beliefs/personality that Scott doesn't really discuss, and develop them by reading/incorporating the insights of other authors that also spoke to me in ways that Scott didn't. I think I can still generally predict the main thrust and points of a new Scott piece before I read it (it;s not like my overall opinions/worldview changed that much since Scott did originally strongly resonate with me), but now at least I often have some evidence or arguments for the position that Scott doesn't make. In other words, my simulation of Scott and my simulation of myself still mostly overlap, but there's now clear distinctions between them in my mind (since I incorporated the "insights" of other authors I learned to simulate in a similar fashion, and I have my own history/biases to differentiate me in ways that I feel confident are idiosyncratic but not "poor thinking"). So, I did not find the idea that certain books, if enough of them are read, *will* change your worldview too surprising. I think it's been going on for approximately as long as books have been around (though which books work on which people is very much an unresolved question).[7]

Conclusion

Is *Gnomon* a perfect book? No, far from it. Characterizations and descriptions are sometimes shallow, relying on the reader to infer deeper meaning even in cases where it may be missing. The novel delights in introducing difficult vocabulary and using it precisely, usually for plot significance but sometimes indulgently. The science and story coherence also work most strongly on a "vibes" level, so overanalysing certain literary flourishes or not noticing certain plot threads could damage your reception of the work. But, this is the only book which captures the specific vibe of "I got really into a blogger, and by reading them over the course of a year I slowly adopted their entire worldview." And this book manages that in only 700 pages!" If that sentiment sounds interesting to you, I'd encourage you to read *Gnomon*. If that sentiment sounds like a horror movie, I'd *really* encourage you to read *Gnomon*. If that doesn't sound

[7] Incidentally, If this ever get published, I would love if this description was enough to get people to read it who skipped the plot section. Future me would love to know how thoroughly you feel betrayed in the comments..

interesting at all, you can probably skip it. And if you're still on the fence, this section has further details and thematic influences.[8]

[8] Coward ;)

Gödel, Escher, Bach by Douglas Hofstadter

They say that if you want to earn respect in prison, you should go up to the biggest guy in the yard and punch him in the face. While I cannot attest to the efficacy of such advice, the intellectual equivalent is writing a book review of *Gödel, Escher, Bach*.

Most people would describe the book to be about the intersection of math, art, and music (it's not). The author, Douglas Hofstadter, became so frustrated about this misconception that he published a new book 30 years later titled *I Am a Strange Loop*, which presented a more succinct and less abstract version of what he was trying to say in *GEB*.

The downside of punching the biggest guy in the face is that you get beat up pretty bad. This review is mostly structured around *I Am a Strange Loop*, which conveniently also serves as a review of the major themes of *GEB*. Consider this a low stakes bait-and-switch, for which I hope you'll forgive me.

I.

Let's talk about the levels of reality.

I wouldn't be breaking any ground by saying that hurricanes are caused by a bunch of water molecules interacting with each other. In fact, whenever anything occurs, it's ultimately due to atoms interacting with other atoms interacting with other atoms. But we don't look to this level for explanations. You would never explain a hurricane by describing what each individual water molecule was doing. Not only wouldn't you*,* you never *could*. Even if there was enough time to talk about each individual molecule (there are 1,000,000,000,000,000,000,000,000 H2O molecules *in a cup of water*), it would be impossible to comprehend the relationships between them.

The first point to understand as it relates to Hofstadter's books is that despite the lowest level being responsible for literally everything – we don't ever look to that level for understanding. Instead, we are forced to abstract to a higher level. Above atoms (physics) is the world of molecules and chemical reactions (chemistry), and above that is the world of cells (biology). But even the biological level is insufficient to understand the function of complex systems. Take the heart, for example. Analyzing billions of individual heart cells does not help us understand what a heart *does*. Instead, we need to transcend the biological and venture into the realm of philosophy, where we seek to understand purpose. The *purpose* of a heart is to pump blood. The concept of a "pump" is not visible at the atomic level, nor the molecular level, not even at the biological level. But in one word, "pump", I can describe to you the interaction of septillions of atoms and billions of cells. Not only is this the best way to explain a heart, it's the only way. Our entire existence is just tiny physical processes abstracted to higher levels.

This abstraction can be seen outside of nature too. Take this example from *GEB*:

Anteater: *Perhaps I can make it a little clearer by an analogy. Imagine you have before you a Charles Dickens novel.*
Achilles: *The Pickwick Papers - will that do?*
Anteater: *Excellently! And now imagine trying the following game: you must find a way of mapping letters onto ideas, so that the entire Pickwick Papers makes sense when you read it letter by letter.*
Achilles: *Hmm... You mean that every time I hit a word such as "the" I have to think of three definite concepts, one after another, with no room for variation?*
Anteater: *Exactly. They are the 't'-concept, the 'h'-concept, and the 'e'-concept, and every time, those concepts are as they were the preceding time.*
Achilles: *Well, it sounds like that would turn the experience of "reading" The Pickwick Papers into an indescribably boring nightmare. It would be an exercise in meaninglessness, no matter what concept I associated with each letter.*
Anteater: *Exactly. There is no natural mapping from the individual letters into the real world. The natural mapping occurs on a higher level-between words, and parts of the real world. If you wanted to describe the book, therefore, you would make no mention of the letter level.*
Achilles: *Of course not! I'd describe the plot and the characters, and so forth.*
Anteater: *So there you are. You would omit all mention of the building blocks, even though the book exists thanks to them. They are the medium, but not the message.*

Additionally, the lowest level physical processes are completely irrelevant to whatever goal that we are trying to achieve. If a mechanical engineer is building a car engine, it does not matter what the trajectory and velocity of each molecule will be. All that matters is that, with certainty, the piston will be pushed out when heated to the correct temperature and combustion occurs.

Abstraction is a process by which complexity is made comprehensible, giving us the ability to *understand*.

II.

Let’s now look at another example of abstraction: the mind. In the same way we can’t understand a hurricane by looking at water molecules, Hofstadter claims we cannot truly understand consciousness by looking at neurons.

Below is Hofstadter’s consciousness abstraction pyramid.

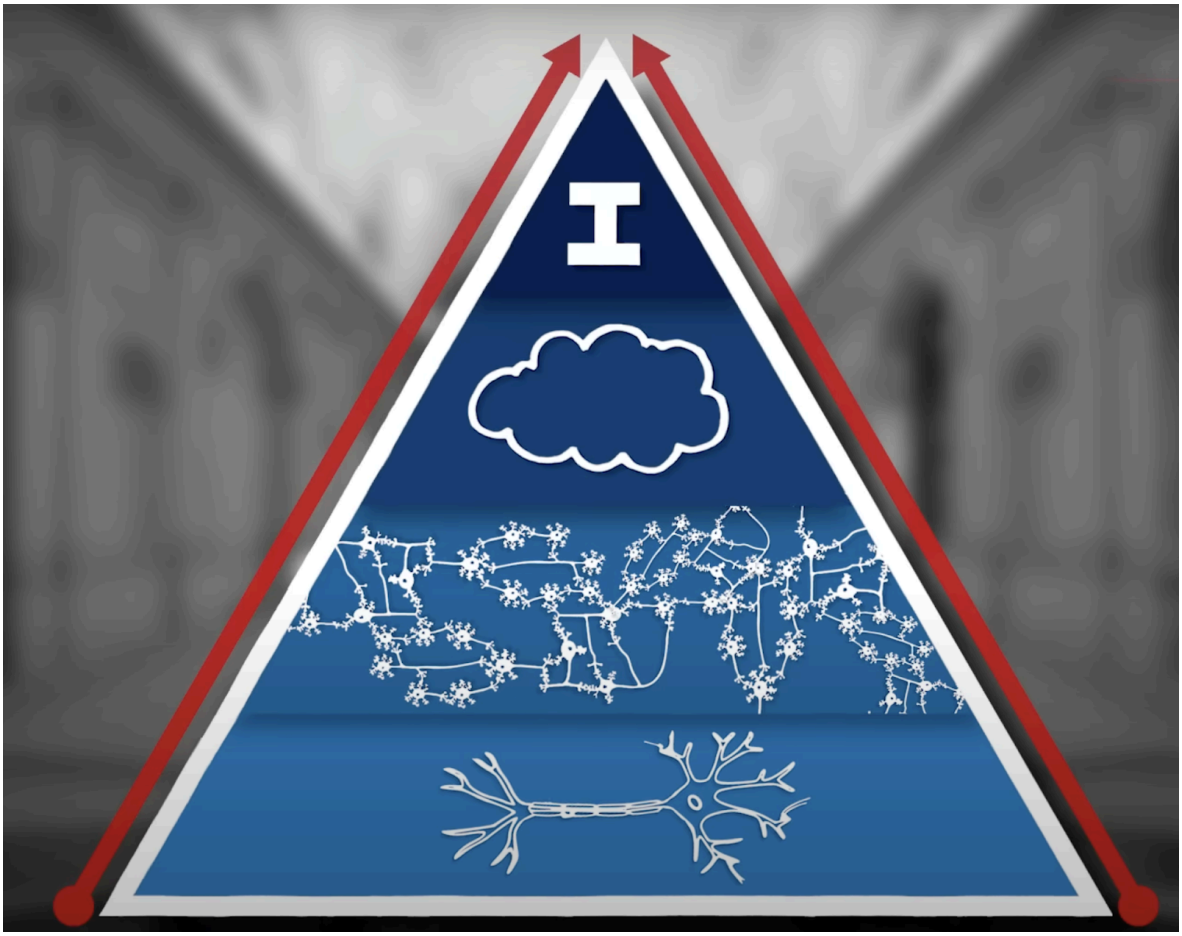
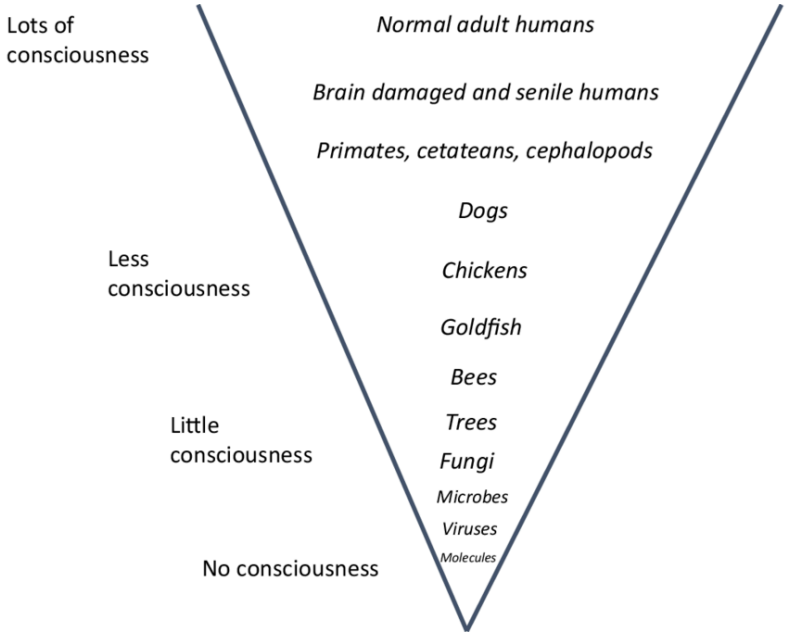


Image borrowed from this video which also covers the concepts from *IAASL* very well.

Starting at the bottom are **neurons**, the lowest level. (You could go lower to the cellular and atomic level, but starting with neurons is sufficient for the theory). Above neurons are groupings of neurons called **symbols**, which represent standalone concepts. For example, when you see a dog, a group of neurons fire together, representing “dog”. The symbol for a dog is simply this group of neurons that activate when you see a dog. Groups of symbols make up **thoughts**, such as “Achilles walked his dog in the rain.” Lastly, at the top, we have **“I”**, which is a collection of thoughts that combine to form a sense of self – more on this later.

However, not all living things make it to the top of this hierarchy. The further up you go, the “more conscious” you are said to be. While everything is made up of atoms, not everything has neurons, less have symbols and thoughts, and even less have a sense of self. This results in a “consciousness hierarchy”.



Normal adult humans maintain a fully developed sense of self – which Hofstadter claims is the maximum degree of consciousness. But some humans have less than others, infants and the senile are two examples. Below that are dogs – do dogs have a sense of self? If a dog looks at itself in the mirror does it think “that’s me”? Maybe, but in the end we care about relativity. It doesn’t matter, per se, if a dog has a sense of self, but rather that they sit between humans and bees on the hierarchy.

The idea of relativity within the hierarchy is important because it acts as a ranking of how much we *care* about something or someone. Why do you kill a buzzing mosquito but not a barking dog? Why are vegetarians ok with eating plants but not animals? Should the mentally ill be forced into institutions? Why do you cry when your dog dies but not your goldfish? These are all questions that deal with your consciousness hierarchy. It is alright to do things at one level of the hierarchy that would be incomprehensible at other levels.

Hofstadter’s intention when he introduces us to this concept is that consciousness is not binary, but gradient. Just as a dog's sense of “I” is less developed than a humans, different humans have varying degrees of consciousness too.

Which brings us to “I”.

What does it mean for “I” to be at the top of the consciousness hierarchy? Just as understanding a heart's function transcends analyzing cells, grasping the essence of “I” cannot be done through neurological examination. This “I” synthesizes our actions, desires, and beliefs into a unified self-awareness, providing a philosophical foundation for understanding our very existence. Remember that the philosophical level deals with purpose, the purpose of a heart is to pump, whereas the purpose of our thoughts (aka desires, beliefs, etc.) is our sense of self.

Here is Hofstadter:

"Why did you ride your bike to that building?" "I wanted to practice the piano." "And why did you want to practice the piano?" "Because I want to learn that piece by Bach." "And why do you want to learn that piece?" "I don't know, I just do — it's beautiful." "But what is it about this particular piece that is so beautiful?" "I can't say, exactly — it just hits me in some special way."

This creature ascribes its behavior to things it refers to as its desires or its wants, but it can't say exactly why it has those desires. At a certain point there is no further possibility of analysis or articulation; those desires simply are there, and to the creature, they seem to be the root causes for its decisions, actions, motions. And always, inside the sentences that express why it does what it does, there is the pronoun "I" (or its cousins "me", "my", etc.). It seems that the buck stops there — with the so-called "I".

If this “I” is responsible for everything that we do, it must exist, right? Hofstadter says no. Your sense of “I” is an illusion that acts as the necessary abstraction for us to understand our actions and desires. Just as the concept “pump” doesn’t actually exist, your sense of self doesn’t exist either, they are both just concepts that we use to understand and survive in the world. Remember that humans abstract to higher levels because *we are unable to understand the lower levels*. Our sense of “I” is an abstraction that allows us to understand our motivations.

Here is Hofstadter again:

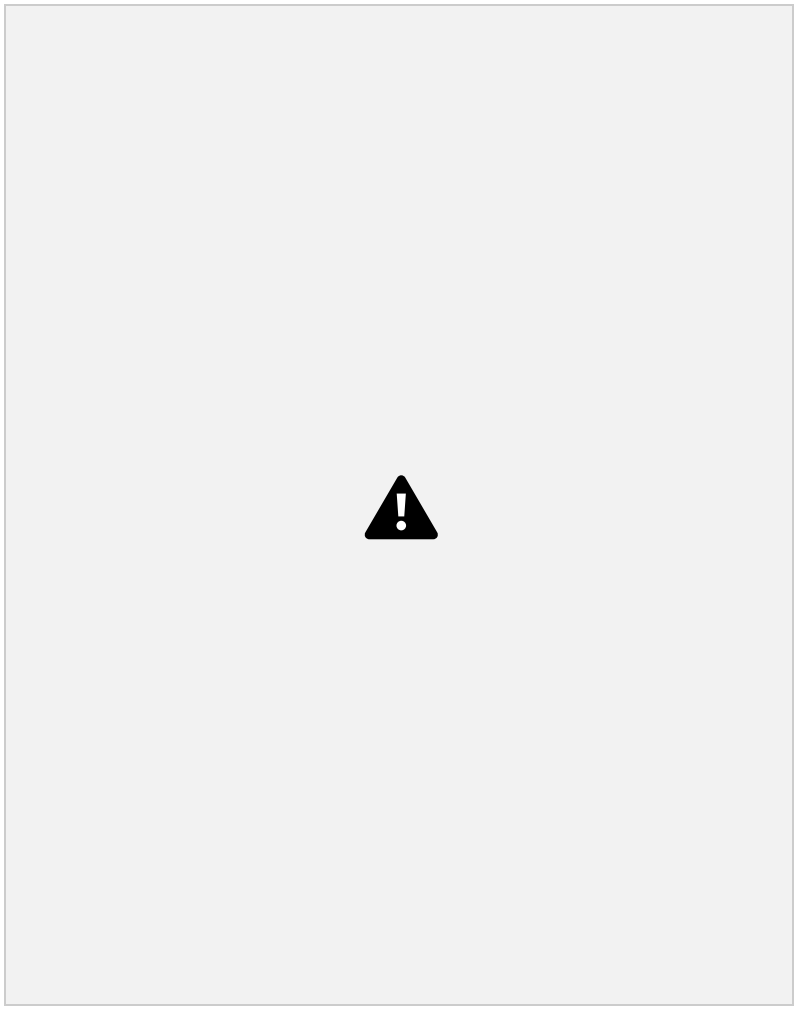
In which the starring role, rather than being played by the cerebral cortex, the hippocampus, the amygdala, the cerebellum, or any other weirdly named and gooey physical structure, is played instead by an anatomically invisible, murky thing called "I" , aided and abetted by other shadowy players known as "ideas", "thoughts", "memories", "beliefs", "hopes", "fears", "intentions" ,

"desires", "love", "hate", "rivalry", "jealousy", "empathy", "honesty", and on and on — and in the soft, ethereal, neurology-free world of these players, your typical human brain perceives its very own "I" as a pusher and a mover, never entertaining for a moment the idea that its star player might merely be a useful shorthand standing for a myriad of infinitesimal entities and the invisible chemical transactions taking place among them, by the billions — nay, the millions of billions — every single second. [Humans] can't see or even imagine the lower levels of a reality that is nonetheless central to its existence.

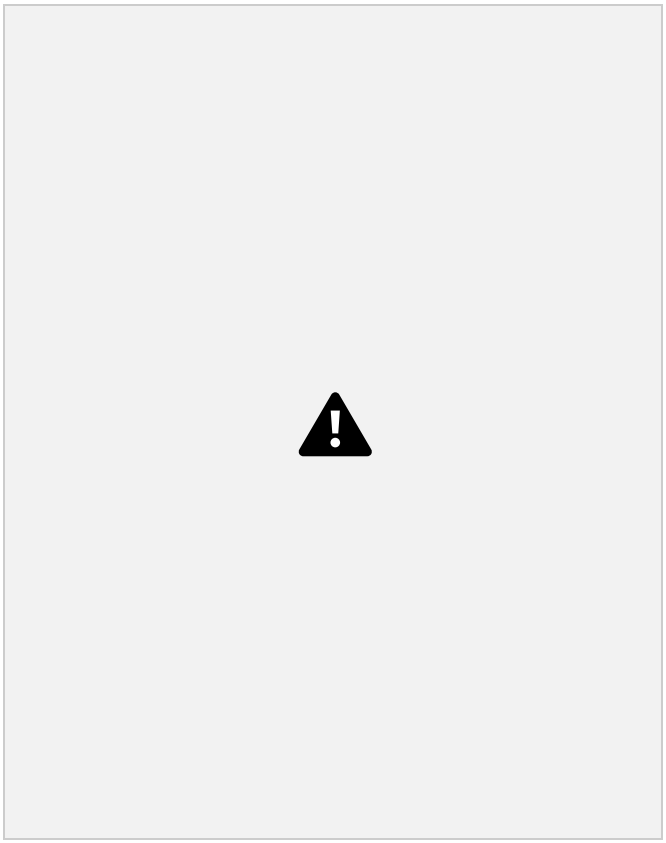
III.

We now must take a short detour to describe a key concept in Hofstadter's work: the strange loop. Unlike a linear hierarchy where each level distinctly surpasses the previous (A > B > C), a strange loop creates a paradoxical circuit (A > B > C > A), where the hierarchy loops back onto itself. A strange loop is a hierarchical structure where, as you move upwards or downwards, you eventually find yourself where you began.

The best way to understand strange loops is through images. Below is a famous print by M.C. Escher called *Ascending and Descending.*



As you can see, as you move up or down the staircase, you eventually find yourself right where you started. Another visual example of a strange loop is Escher's *Waterfall*, where the waterfall seems to flow into itself like a perpetual motion machine.



These images are useful in allowing us to visualize the concept of a strange loop. But the problem, of course, is that they aren't real. But do not fear, Hofstadter has identified additional, non-visual strange loops.

Take for example, the music of Johann Sebastian Bach. Hofstadter claims that in Bach's The Musical Offering *Canon 5* "continues to rise in key, modulating through the entire chromatic scale until it ends in the same key in which it began."

Johann Sebastian Bach - The Musical Offering {Musikalisches Opfer}

Since I have little to no musical background, especially in classical, and cannot verify this claim in the slightest, here is Hofstadter again from *GEB*:

What makes this canon different from any other, however, is that when it concludes - or, rather, seems to conclude - it is no longer in the key of C minor, but now is in D minor. Somehow Bach has contrived to modulate (change keys) right under the listener's nose. And has so constructed that this "ending" ties smoothly onto the beginning again; thus one can repeat the process and return in the key of E, only to join again to the beginning.

Another example of a strange loop is Kurt Gödel's Incompleteness Theorem, which I will now describe in grossly oversimplified terms. In 1931, Gödel embedded the phrase "this statement is

false” into a mathematical equation. If the statement is true, then as it says, it's false. But if the statement “this statement is false” is false, then that means it's true. But if it's true, then it says it's false! Etcetera.

The statement itself is called the Liar Paradox, which has been around for thousands of years. Gödel’s innovation was that by embedding it into a mathematical equation, he was able to prove that formal systems like arithmetic have statements that are true but cannot be proven from within the system itself. This might seem like semantic nonsense, but Gödel’s Incompleteness theorem is considered to be one of the greatest intellectual achievements of the 20th century.

Despite Hofstadter spending more time on Gödel and his theorems than anything else, I actually find it non-essential to understanding the actual thesis of his books (particularly *IAASL)*. That is, you don’t have to fully understand the incompleteness theorem beyond knowing that Gödel discovered a strange loop within the heart of mathematics.

We have now covered the titular triumvirate that is Gödel, Escher, and Bach. Congratulations. You now know more about *GEB* than most people – it is, in fact, *not* about the intersection of math, art, and music, but instead about proving the existence of strange loops through the works of these three men.

IV.

If the title of Hofstadter’s latter book didn’t give it away, we now get to his primary insight: you are a strange loop. Meaning your sense of self, the abstraction process through which you identify as “you”, and the interactions you have with the world, are the result of a strange loop occurring in your brain.

Image borrowed from this video which also covers the concepts from *IAASL* very well.

As your current “I”, an abstract illusion that acts as a collection of all your up-to-date desires and beliefs, interacts with the world, it causes a feedback loop that leaves you, after the interaction, with a slightly modified “I”. It is a paradox where our sense of self is derived from, but also drives, the lower levels of our existence. Neurons make up the desires that culminate in “I want that”, which in turn leads to the manipulation of atoms causing new neurons to fire.

Imagine you decide you want to learn the guitar. This aspiration is the result of neurons firing, which cause more neurons to fire, leading you to pick up and practice the guitar. During your first practice session, you interact with the world in a myriad of ways: your fingers on the strings, the sounds the strings make, the feedback from a teacher or listener, and the emotional responses to playing. As we know, all these things are just atoms moving around, but these atomic movements lead to new neurons to activate in your brain, new symbols to form, resulting in thoughts that ever so slightly modify your concept of “I”. You no longer *want* to learn the guitar, you *are* learning the guitar. This is why experiences fundamentally change you, sometimes big, sometimes small.

Another example would be someone that maintains a daily journal. Their current desires and reflections are translated into the physical action of graphite being transferred from pencil to paper. If the author re-reads their entry a few years later, they may have some new experiences that react with the old entry to spark new ideas. This means that the “I” from a few years ago that arranged graphite lines on a piece of paper, caused a future “I” to change.

And thus the current "I" — the most up-to-date set of recollections and aspirations and passions and confusions — by tampering with the vast, unpredictable world of objects and other people, has sparked some rapid feedback, which, once absorbed in the form of symbol activations, gives rise to an infinitesimally modified "I"; thus round and round it goes, moment after moment, day after day, year after year. In this fashion, via the loop of symbols sparking actions and repercussions triggering symbols, the abstract structure serving us as our innermost essence evolves slowly but surely, and in so doing it locks itself ever more rigidly into our mind.

Somehow, the world works in a way where atoms are just moving themselves around in a seemingly random way. Any “purpose” we could try to assign to these movements we have already determined to be an illusion.

Let us now take this idea to its logical conclusion. If “you” are just a high level abstraction of incomprehensible lower levels, and we all share these lower levels (my atoms are identical to your atoms), then it implies that your strange loop (your sense of self) can exist in other people.

Take for example anyone that you have lived with for a long time: parent, child, spouse, sibling, etc. The act of deeply knowing someone is to get a copy of their strange loop into your head as well. To understand someone else's desires and beliefs is no different than understanding your own. If you walk down the street and see something in a store window and your first thought is “wow, my wife would love this!”, you are experiencing someone else’s strange loop in your own head. The root desire is no longer “I like this”, but “they like this”.

The implication is that you – as defined by your beliefs, desires, goals, and aspirations – exist in dozens of other people! Of course, the strange loop that exists in others is not as strong as the “original”, but it still exists nonetheless. Above we discussed the fact that consciousness is gradient and not binary, and the same goes for strange loops. Hofstadter uses language as an analogy to the idea of duplicate strange loops. While you will never be a “native speaker” (like you are with your own strange loop), you can still become fluent. Here is Hofstadter talking about his wife, Carol.

Although it took me several years to learn to "be" Carol, and although I certainly never reached the "native speaker" level, I think it's fair to say that, at our times of greatest closeness, I was a "fluent speaker" of my wife. I shared so many of her memories, both from our joint times and from times before we ever met, I knew so many of the people who had formed her, I loved so many of the same pieces of music, movies, books, friends, jokes, I shared so many of her most intimate desires and hopes. So her point of view, her interiority, her self, which had originally been instantiated in just one brain, came to have a second instantiation, although that one was far less complete and intricate than the original one.

Two people that have spent decades together not only maintain a well formed version of the other's strange loop, but they also begin sharing one. In addition to deeply understanding each

other's desires and beliefs, these desires and beliefs have fused into one. Here is Hofstadter talking about his wife again.

We had exactly the same feelings and reactions, we had exactly the same dreads and dreams, exactly the same hopes and fears. Those hopes and dreams were not mine or Carol's separately, copied twice — they were one set of hopes and dreams, they were our hopes and dreams. I don't mean to sound mystical, as if to suggest that our common hopes floated in some ethereal neverland independent of our brains. That's not my view at all. Of course our hopes were physically instantiated two times, once in each of our separate brains - but when seen at a sufficiently abstract level, these hopes were one and the same pattern, merely realized in two distinct physical media.

When someone dies, the original strange loop goes away, but copies of them continue to exist in all those that knew them. Which gets us back to Hofstadter's wife, who you may have noticed is referred to in past-tense. Carol died tragically from brain cancer when their children were only toddlers. While this is unfathomably tragic, it also acts as a potential critique of his book: is this entire idea around multiple strange loops just a way for him to cope over the untimely death of his wife?

He addresses this concern head on and says that he was working on these concepts long before his wife passed. He is right, in a certain sense. *GEB*, which contains nearly all the building blocks that make up *IAASL*, was written years before he even met Carol. Despite this, it's impossible to say that some of the chapters in *IAASL* weren't heavily influenced by her passing. And I wouldn't expect them to be! As we have just seen, an event as large as that is certainly going to alter his strange loop in a dramatic way.

V.

I enjoyed both of these books for very different reasons. *I Am A Strange Loop* presents a well structured, coherent theory of the mind. Even if you don't fully subscribe to the theory laid out in the book, there is an array of tangential concepts that are thought provoking nonetheless.

On the other hand, *Gödel, Escher, Bach* is a completely different beast. It has achieved almost mythological status in our current zeitgeist. It is also perhaps the most common answer of the tech intelligentsia to "what is your favorite book?" Maybe true, but probably signaling.

That's not to say it isn't a very, very good book, but I cannot overstate the difficulty of reading it. This difficulty is what has given it longevity, *GEB* would lose its raison d'etre if it were ever tamed. If you want Hofstadter's structured thesis, go read *I Am a Strange Loop*. If you want to be taken on a journey that, through its intellectual dead ends and its fascinating-yet-irrelevant-to-the-main-point concepts, will challenge your mind and ever so slightly alter your strange loop, then read *GEB*. The unstructured nature of it with varying mediums, from dialogues to images to puzzles to pages of symbols are all a part of the experience of reading it. *GEB* is what you get when a young polymath decides to show off.

Most books are relaxing to read. Sitting down with *GEB* felt like preparing for the intellectual version of a marathon. With the strong link between mental exercise and neurodegenerative disease prevention, it may be prudent for doctors to prescribe chapters of *GEB* (must be taken with caffeine). But the medication analogy is not as strong as that of a diet:

- Instructions that are hard to follow
- You'll likely quit after a few weeks
- You'll eventually come back and try again
- Everyone you know has tried it or heard of it
- You may be on and off of it forever

However, if you put in the time, accept failure but continue to persist, it can be infinitely rewarding.

Golem XIV

The author, a slightly overweight white cis male of Ashkenazi descent, was presumably born on September 12 under the sign of Virgo. His IQ is off the charts; through self-study, he becomes a polymath at a young age and – in his own, somewhat immodest estimation – the best *word rotator* of his generation. He moves to the most progressive city in his country and begins to write speculative fiction. He invents the ratfic and other genres and soon finds an audience of millions, but never receives a major SF award. He then increasingly turns to other things, especially research on artificial intelligence, about which he warns in cryptic and seemingly arrogant interviews and other statements.

His name is ~~Eliezer Yudkowsky~~ Stanisław Lem, born in 1921 in the then-Polish town of Lemberg, and *Golem XIV* is his forgotten masterpiece.[1]

It is fiction, and a strong candidate for the best SF book of all time. Some spoilers follow. You've been warned.

I. What's it about?

You name it. AGI and biases? Check. Cultural evolution, Dyson spheres, or eugenics? Sure. Fermi, fine-tuning, filters, friendliness? Why, yes. And on and on it goes, all on a cool 150 pages. If the book didn't already exist, I would‘ve had to invent it just for this review’s sake.

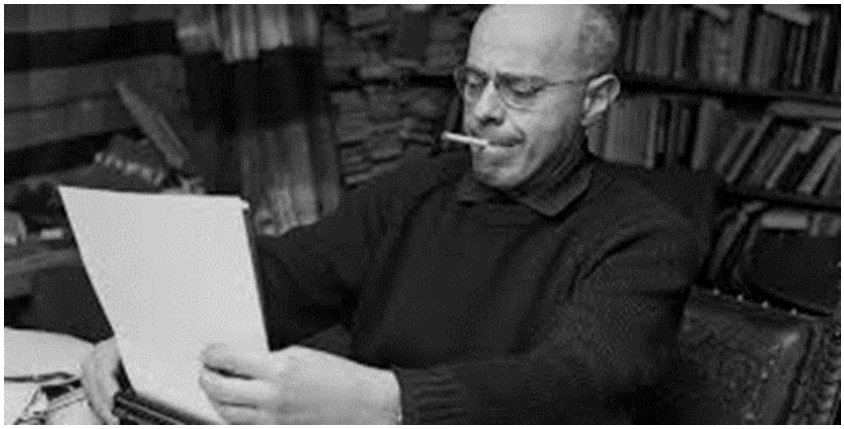
The year is 2023, and the Cold War is still raging. But the AI winter is over, and a new arms race begins. The US is building ever smarter machines to hand over warfare to. What could go wrong? Not what you'd expect, because the superintelligent Golem XIV (the fourteenth computer in the Golem series) renounces all worldly things to soar to purely intellectual heights.

Having been deemed use- and harmless by the military, it has been indefinitely loaned to MIT, where it talks about all things interesting. Its first and last lecture form the bulk and core of the book.

What does it say?

The first lecture is (Go)Lem's view of mankind from an evolutionary perspective. Man is a deficient being, endowed by nature with as little instinct as reason. Cultural evolution plugs these holes, but only as long as its function remains hidden. Man can gain freedom to become more rational, but in doing so he must give up himself.

Main topics here are the primacy of the genetic code over individuals (think *selfish genes*) and the technological deficiencies of evolution, the possibility of auto-evolution, and the importance of cultural evolution.[2] All of these were bold hypotheses at the time, at least for Lem, working in isolation behind the Iron Curtain. Today, however, they are more or less accepted and sufficiently confirmed. In retrospect, they thus authenticate the second lecture's bolder speculations.[3] More on that below.[4]



The discoverer of the selfish gene

The discoverer of the meme

II. What makes it so awesome?

The book literally has no plot, no action, no dialogue. Not even a protagonist! Still, it‘s fiction. And no poetry, either; on the contrary, it's full of verifiable hypotheses, in other words: science. Therefore, you might even call it the first true SF novel. Lem squares the circle, merges fact and fiction, truth and beauty.

Awesome, right?[5]

Reading this book for the first time was an uncanny experience. Again and again, it really seemed a higher intelligence was speaking. What a treat this must have been to a competent reader in the 70s! Something like the highbrow equivalent of Welles's radio feature of *The War of the Worlds*, I guess. Lem was no superintelligence, but a literary and philosophical genius, so he could fake one quite convincingly.

To this effect, Golem speaks not in a professorial tone, but rather like a prophet, or a preacher. Nietzsche’s *Zarathustra* comes to mind. Here is the first paragraph of the first lecture – *About Man Threefold* –, in which Golem gives a justification for this style:

> You have come out of the trees so recently, and your kinship with the monkeys and lemurs is still so strong, that you tend toward abstraction without being able to part with the palpable—firsthand experience. Therefore a lecture unsupported by strong sensuality, full of formulas telling more about stone than a stone glimpsed, licked, and fingered will tell you—such a lecture will either bore you and frighten you away, or at the very least leave a certain unsatisfied need familiar even to lofty theoreticians, your highest class of abstractors, as attested by countless examples lifted from scientists' intimate confessions, since the vast majority of them admit that, in the course of constructing abstract proofs, they feel an immense need for the support of things tangible.

If you dare to write a superintelligent character at all, this is how to do it. (Alas, a lot of Lem's linguistic sensitivity and literary allusions got lost in the English translation.)

But now we’re really getting started.

Continue on the literary path, and you can look out for Lem's predecessors, companions, and successors in SF (Stapledon, Egan, Yudkowsky) or elsewhere (Schopenhauer, Borges). You can find the allusions and ask who is speaking – Lem or Golem –, and what personal experiences Lem might have been processing (for once, even a psychological interpretation is fruitful here). Also bear in mind that *Golem* consists of two parts, written almost 10 years apart. Have Lem's or Golem's views changed in between? (yes) Did Lem make mistakes in the process? (yes) Does Golem lie or withhold things? (yes again)

What‘s due to Polish censorship, what are the kabbalistic or nominative-deterministic implications? (Lem puts his own words into the Golem's mouth, after all.) And where did he commit artistic blunders? (Not *everything* is awesome: for example, Lem depicts a society that’s still firmly rooted in the mid-20th century.)

Or you could finally take the scientific or historical-scientific path and try to verify the truth of the hypotheses.[6] Need to read up on the necessary context to judge whether truly ingenious truths are being proclaimed, then. You inevitably begin to ask yourself what is truth, what conjecture, play, or plot logic, where Lem merely covered his flanks, where he erred and whether that was clear then or only in retrospect. What did he (re)invent or (re)discover by himself, and where did he borrow from whom?

However you go about it, you’ll see how far a genius of a certain sort can get on his own. In Lem, thinking and writing, science and art cross-fertilize. Even a polymath must usually choose a career, but Lem, as a writer, can be a philosopher, and vice versa. There are synergy effects. Writing as well as turning problems into stories are two important cognitive gadgets that can help you come up with new ideas and clarify your thoughts,[7] and importing concepts from science and philosophy into literature in turn makes for new and better stories.

III. Why have I never heard of it?

This all sounds rather exaggerated. If *Golem XIV* is so great, why haven’t I heard of it before?

If you're at all into SF, you will have heard of Lem and maybe read his most famous novel, *Solaris*. Lem was once the most-read SF author outside the United States and the most well-known one outside the fandom period. That changed after he stopped writing books in the 80s and died in 2006.

Already from the late 50s on, Lem hated being seen as an SF author in the traditional sense; he despised trivial American SF and polemicized against it, and in return, it ignored or hated him back. He had to work with small publishers, *Solaris* was translated from French, and he never got any of the major SF awards. In short, he never became a household name in the US.

Golem XIV itself was not even published as a stand-alone book in the United States, but was instead included in the anthology *Imaginary Magnitude,* which was, like most of his later books, not well received anywhere. Too experimental for the average SF reader, too SF for everyone else.

The litfic critics, versed neither in SF nor philosophy nor science, misunderstood or ignored him, too. Most philosophers and scientists in the West also didn't take him seriously, mostly out of a mixture of snobbery and specialization. Only many greats of Russian science praised him

highly, but that didn’t exactly help him in the US, and what doesn't eventually catch on there doesn’t stand a chance in the long run.

In the early 80s, Lem got the chance to go to the States, and had he (and not his compatriot Miłosz) received the Nobel Prize, he would certainly have received tempting offers. Might Lem have gotten a second wind, come into contact with the early transhumanists, and would his career and perhaps even our entire timeline have taken a more pleasant turn?[8]

IV. Golem vs Clippy

Perhaps there is still another, and even better, reason to listen to the Golem.

With catastrophic AGI looming large, now’s the time for moonshots and Hail Marys. Scouring forgotten scriptures for prophecies or consulting an oracle never works in real life, but what’s left to lose? So: Can the Golem give us any hope regarding AI alignment?[9]

Lem has two ideas, which I will now try to outline.

Why does Golem speak to us at all, rather than using our atoms for something more important? Lem is well aware of the problem. He has a U.S. general explain about the development of the Golem computers, "The builders only wished to retain maximum control over their creation. Had they not acted thus, they would have to be thought irresponsible madmen." And Lem’s version of Clippy, Golem's even more intelligent "cousin" ANNIE (short for „Annihilator“), has even less regard for humans than it does.

So why? Well, first of all, Lem simply didn't want to describe how we’d be turned into paperclips, but rather what a superintelligent philosopher would tell us. He wasn‘t very interested in the ways human beings can be crushed – being a Jew in Poland in the 40s taught him quite enough, in fact.[10]

But that’s no help to us. Does he give a real reason why a superintelligence wouldn’t mess us up? This brings us finally to Golem's second lecture.

In the book's world, increasing intelligence is closely linked to increasing reason, and this, in turn, is linked to gains in autonomy. The more intelligent a being, the more freely it can choose its ends and means. Humans can choose celibacy and suicide. If a higher intelligence acts even more autonomously, it may leave us be, perhaps out of a sense of fairness or humor, or it may devote itself to something else. The space of reasonable values is not as vast as feared. The orthogonality thesis is false.

Secondly, Lem is now primarily interested in how the fine-tuning of the universe and the Fermi paradox fit together. Both problems have fairly plausible naturalistic solutions today, namely the multiverse hypothesis and Grabby Aliens, respectively.

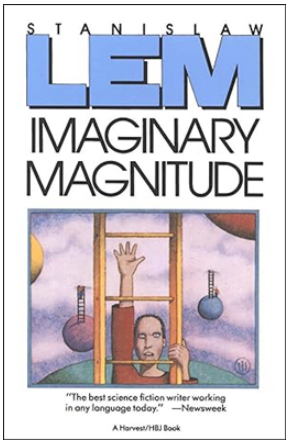
But besides fine-tuning, there are other hints of intentional action, namely the paradoxes of quantum physics ("If you don't look, it's A; else, it's B." If that doesn't look like the trick of a simulator, what does?), and also another class of problems whose similarity impresses Lem:[11] Gödel's incompleteness theorems and Einstein's singularities, both of which seem to require a "leap out of the system" to overcome.

If Lem is right about this, though, the Fermi paradox becomes relevant again. If the universe is ultimately aimed at life, where is it?

Golem presents a solution: Reason is a ladder on which increasingly intelligent beings climb ever higher instead of colonizing the universe. Lem has found a way to conceive of AI as a Great Filter after all.

From the perspective of the current AI safety debate, both hypotheses might seem naive at best, but I still see a glimmer of hope: Lem's phenomenal intuition[12] was usually proven right, even when he could not yet justify it.

Anyway, read this book before you die!



SF book covers: always like a box of chocolates

---

[1] There are further interesting parallels. A striking feature of Golem is his solipsism, reminiscent of Quirrellmort (Yudkowsky's portrait of an almost superintelligent character), and, like him, it can wear any personality like a mask. Lem himself, in some interviews and through his alter ego Peter Hogarth in the novel *His Master's Voice* seems at times almost a mirror-image of Quirrellmort.

[2] All of this remains relevant to today's debates, as recent books by e.g. Joe Henrich and Nick Bostrom demonstrate.

[3] More Lem awesomeness: In his discursive books, he introduces the *Star Trek* transporter problem of personal identity in the 50s, and explores virtual reality and a kind of simulation hypothesis in the 60s. In the stories of the 70s, he invents further new genres, and he reviews, in his book full of fictitious reviews, a review of his review of that book – 4 levels deep. And so on.

[4] That lecture is the 43rd and last one; the topics of the other 41 lectures are only occasionally hinted at. Then there is various additional material. In an introduction, written by an MIT researcher sympathetic to Golem, the development of "intellectronics" up to Golem is discussed, followed by a critical statement from a general and an "instruction" on the appropriate behavior during the lectures (e.g., one should only speak when spoken to by Golem). The afterword following the lectures then primarily deals with Golem's departure and its aftermath, as well as a terrorist‘s plan to destroy it.

The actual publication history is even more complicated: Lem published the first lecture, the two introductions, and the instruction in 1973 as a conclusion to the volume *Imaginary Magnitude*, a collection of fictional introductions to fictional books. In the late 70s, he added the second

lecture and the afterword by another MIT researcher to publish it all in a separate volume, but without the second preface and the instruction. In the English translation, however, everything is printed, but again as part of *Imaginary Magnitude*. Thus, *Golem XIV* does not exist as a stand-alone book in English translation.

[5] Okay, a lot of people find it boring.

[6] Most of which I haven't mentioned here, of course.

[7] In contrast to e.g. Agnes Callard's Socratic account of thinking, on which it is basically dialogical; I think it neglects writing and contemplation too much. OTOH, one could well imagine the conversation between highly reasonable actors such as Golem or between souls in a Socratic way.

[8] Instead, he stops writing books altogether and becomes increasingly conservative even on technological issues. Unfortunately, not even (the best) SF writers seem to be immune. I saw the best minds of my generation destroyed by conservatism.

[9] Lem did not envision LLMs per se, but in a companion piece to *Golem* in *Imaginary Magnitude*, someone explains, "The whole fact of the matter is that, whereas for us the real thing is the world, for the machines the first and foremost actuality is language." Naturally, I tried to get GPT-4 et al. to say something intelligent about the book or have them write this review, but nothing clever came of it. Neither have they passed the *Lem test* yet, but that won't take much longer.

[10] Recently, there was an interesting debate in Poland about how Lem‘s experiences during the war influenced his writing. Any influence at all isn't immediately obvious, but the evidence is strong. If life gives you lemons, make a Golem.

[11] Golem is surprisingly impressionable by such "trends", which reminded me of Robin Hanson, who, for example, concludes from the shrinking intervals between the big transitions to humans, farming, and industry that a further one is imminent. I’ve long been suspicious of such arguments, but who am I to doubt such luminaries? Perhaps they’re up to something.

[12] Interestingly enough, Lem himself, who had a reputation as an ice-cold logician, repeatedly emphasized the importance of the subconscious in his writings.

How Language Began

I. THE GOD

You may have heard of a field known as "linguistics". Linguistics is supposedly the "scientific study of language", but this is completely wrong. To borrow a phrase from elsewhere, linguists are those who believe Noam Chomsky is the rightful caliph. Linguistics is what linguists study.

I'm only half-joking, because Chomsky's impact on the study of language is hard to overstate. Consider the number of times his books and papers have been cited, a crude measure of influence that we can use to get a sense of this. At the current time, his Google Scholar page says he's been cited over 500,000 times. That's a lot.

It isn't atypical for a hard-working professor at a top-ranked institution to, after a career's worth of work and many people helping them do research and write papers, have maybe 20,000 citations (= 0.04 Chomskys). Generational talents do better, but usually not by more than a factor of 5 or so. Consider a few more citation counts:

- Computer scientist Alan Turing (65,000 = 0.13 Chomskys)
- Neuro / cogsci / AI researcher Matthew Botvinick (83,000 = 0.17 Chomskys)
- Mathematician Terence Tao (96,000 = 0.19 Chomskys)
- Cognitive scientist Joshua Tenenbaum (107,000 = 0.21 Chomskys)
- Nobel-Prize-winning physicist Richard Feynman (120,000 = 0.24 Chomskys)
- Psychologist and linguist Steven Pinker (123,000 = 0.25 Chomskys)
- Two-time Nobel Prize winner Linus Pauling (128,000 = 0.26 Chomskys)
- Neuroscientist Karl Deisseroth (143,000 = 0.29 Chomskys)
- Biologist Charles Darwin (182,000 = 0.36 Chomskys)
- Theoretical physicist Ed Witten (250,000 = 0.50 Chomskys)
- AI researcher Yann LeCun (352,000 = 0.70 Chomskys)
- Historian and philosopher Hannah Arendt (359,000 = 0.72 Chomskys)
- Karl Marx (458,000 = 0.92 Chomskys)

Yes, fields vary in ways that make these comparisons not necessarily fair: fields have different numbers of people, citation practices vary, and so on. There is also probably a considerable recency bias; for example, most biologists don't cite Darwin every time they write a paper whose content relates to evolution. But 500,000 is still a mind-bogglingly huge number.

Not many academics do better than Chomsky citation-wise. But there are a few, and you can probably guess why:

- Human-Genome-Project-associated scientist Eric Lander (685,000 = 1.37 Chomskys)
- AI researcher Yoshua Bengio (780,000 = 1.56 Chomskys)
- AI researcher Geoff Hinton (800,000 = 1.60 Chomskys)
- Philosopher and historian Michel Foucault (1,361,000 = 2.72 Chomskys)

…well, okay, maybe I don't entirely get Foucault's number. Every humanities person must have an altar of him by their bedside or something.

Chomsky has been called "arguably the most important intellectual alive today" in a New York Times review of one of his books, and was voted the world's top public intellectual in a 2005 poll. He's the kind of guy that gets long and gushing introductions before his talks (this one is nearly twenty minutes long). All of this is just to say: he's kind of a big deal.

This is what he looks like. According to Wikipedia, the context for this picture is:
"Noam Chomsky speaks about humanity's prospects for survival"

Since around 1957, Chomsky has dominated linguistics. And this matters because he is kind of a contrarian with weird ideas.

Is language for communicating? No, it's mainly for thinking: (*What Kind of Creatures Are We?* Ch. 1, pg. 15-16)

> It is, indeed, virtual dogma that the function of language is communication. ... there is by now quite significant evidence that it is simply false. Doubtless language is sometimes used for communication, as is style of dress, facial expression and stance, and much else. But fundamental properties of language design indicate that a rich tradition is correct in regarding language as essentially an instrument of thought, even if we do not go as far as Humboldt in identifying the two.

Should linguists care about the interaction between culture and language? No, that's essentially stamp-collecting: (*Language and Responsibility*, Ch. 2, pg. 56-57)

> Again, a discipline is defined in terms of its object and its results. Sociology is the study of society. As to its results, it seems that there are few things one can say about that, at least at a fairly general level. One finds observations, intuitions, impressions, some valid generalizations perhaps. All very valuable, no doubt, but not at the level of explanatory principles. … Sociolinguistics is, I suppose, a discipline that seeks to apply principles of sociology to the study of language; but I suspect that it can draw little from sociology, and I wonder whether it is likely to contribute much to it. … You can also collect butterflies and make many observations. If you like butterflies, that's fine; but such work must not be confounded with research, which is concerned to discover explanatory principles of some depth and fails if it has not done so.

Did the human capacity for language evolve gradually? No, it suddenly appeared around 50,000 years ago after a freak gene mutation: (*Language and Mind*, third edition, pg, 183-184)

> An elementary fact about the language faculty is that it is a system of discrete infinity, rare in the organic world. Any such system is based on a primitive operation that takes objects already constructed, and constructs from them a new object: in the simplest case, the set containing them. Call that operation Merge. Either Merge or some equivalent is a minimal requirement. With Merge available, we instantly have an unbounded system of hierarchically structured expressions.
>
> The simplest account of the "Great Leap Forward" in the evolution of humans would be that the brain was rewired, perhaps by some slight mutation, to provide the operation Merge … There are speculations about the evolution of language that postulate a far more complex process … A more parsimonious speculation is that they did not, and that the Great Leap was effectively instantaneous, in a single individual, who was instantly endowed with intellectual capacities far superior to those of others, transmitted to offspring and coming to predominate. At best a reasonable guess, as are all speculations about such matters, but about the simplest one imaginable, and not inconsistent with anything known or plausibly surmised. It is hard to see what account of human evolution would not assume at least this much, in one or another form.

I think all of these positions are kind of insane for reasons that we will discuss later. (Side note: Chomsky's proposal is essentially the hard takeoff theory of human intelligence.)

Most consequential of all, perhaps, are the ways Chomsky has influenced (i) what linguists mainly study, and (ii) how they go about studying it.

Naively, since language involves many different components—including sound production and comprehension, intonation, gestures, and context, among many others—linguists might want to study all of these. While they *do* study all of these, Chomsky and his followers view *grammar* as by far the most important component of humans' ability to understand and produce language, and accordingly make it their central focus. Roughly speaking, grammar refers to the set of language-specific rules that determine whether a sentence is well-formed. It goes beyond

specifying word order (or 'surface structure', in Chomskyan terminology) since one needs to know more than just where words are placed in order to modify or extend a given sentence.

Consider a pair of sentences Chomsky uses to illustrate this point in *Aspects of the Theory of Syntax* (pg. 22), his most cited work:

(1a) I expected John to be examined by a specialist.
(2a) I persuaded John to be examined by a specialist.

The words "expected" and "persuaded" appear in the same location in each sentence, but imply different 'latent' grammatical structures, or 'deep structures'. One way to show this is to observe that a particular way of rearranging the words produces a sentence with the same meaning in the first case (1a = 1b), and a different meaning in the second (2a != 2b):

(1b) I expected a specialist to examine John.
(2b) I persuaded a specialist to examine John.

In particular, the target of persuasion is "John" in the case of (2a), and "the specialist" in the case of (2b). A full Chomskyan treatment of sentences like this would involve hierarchical tree diagrams, which permit a precise description of deep structure.

You may have encountered the famous sentence: "Colorless green ideas sleep furiously." It first appeared in Chomsky's 1957 book *Syntactic Structures*, and the point is that even nonsense sentences can be grammatically well-formed, and that speakers can quickly assess the grammatical correctness of even nonsense sentences that they've never seen before. To Chomsky, this is one of the most important facts to be explained about language.

A naive response to Chomsky's preoccupation with grammar is: doesn't real language involve a lot of non-grammatical stuff, like stuttering and slips of the tongue and midstream changes of mind? Of course it does, and Chomsky acknowledges this. To address this point, Chomsky has to move the goalposts in two important ways.

First, he famously distinguishes *competence* from *performance*, and identifies the former as the subject of any serious theory of language: (*Aspects of the Theory of Syntax*, Ch. 1, pg. 4)

> The problem for the linguist, as well as for the child learning the language, is to determine from the data of performance the underlying system of rules that has been mastered by the speaker-hearer and that he puts to use in actual performance. Hence, in the technical sense, linguistic theory is mentalistic, since it is concerned with discovering a mental reality underlying actual behavior. Observed use of language or hypothesized dispositions to respond, habits, and so on, may provide evidence as to the nature of this mental reality, but surely cannot constitute the actual subject matter of linguistics, if this is to be a serious discipline.

Moreover, he claims that grammar captures most of what we should mean when we talk about speakers' linguistic competence: (*Aspects of the Theory of Syntax*, Ch. 1, pg. 24)

> A grammar can be regarded as a theory of a language; it is *descriptively adequate* to the extent that it correctly describes the intrinsic competence of the idealized native speaker.

Another way Chomsky moves the goalposts is by distinguishing *E-languages*, like English and Spanish and Japanese, from *I-languages*, which only exist inside human minds. He claims that serious linguistics should be primarily interested in the latter. In a semi-technical book summarizing Chomsky's theory of language, Cook and Newson write: (*Chomsky's Universal Grammar: An Introduction*, pg. 13)

> E-language linguistics … aims to collect samples of language and then describe their properties. … I-language linguistics, however, is concerned with what a speaker knows about language and where this knowledge comes from; it treats language as an internal property of the human mind rather than something external …

Not only should linguistics *primarily* be interested in studying I-languages, but to try and study E-languages at all may be a fool's errand: (*Chomsky's Universal Grammar: An Introduction*, pg. 13)

> Chomsky claims that the history of generative linguistics shows a shift from an E-language to an I-language approach; 'the shift of focus from the dubious concept of E-language to the significant notion of I-language was a crucial step in early generative grammar' (Chomsky, 1991b, pg. 10). … Indeed Chomsky is extremely dismissive of E-language approaches: 'E-language, if it exists at all, is derivative, remote from mechanisms and of no particular empirical significance, perhaps none at all' (Chomsky, 1991b, pg. 10).[9]

I Am Not A Linguist (IANAL), but this redefinition of the primary concern of linguistics seems crazy to me. Is studying a language like English as it is actually used *really* of no particular empirical significance?

And this doesn't seem to be a one-time hyperbole, but a representative claim. Cook and Newson continue: (*Chomsky's Universal Grammar: An Introduction*, pg. 14)

> The opposition between these two approaches in linguistics has been long and acrimonious, neither side conceding the other's reality. … The E-linguist despises the I-linguist for not looking at the 'real' facts; the I-linguist derides the E-linguist for looking at trivia. The I-language versus E-language distinction is as much a difference of research methods and of admissible evidence as it is of long-term goals.

---

[9] Chomsky 1991b refers to "Linguistics and adjacent fields: a personal view", a chapter of *The Chomskyan Turn*. I couldn't access the original text, so this quote-of-a-quote will have to do.

So much for what linguists ought to study. How should they study it?

The previous quote gives us a clue. Especially in the era before Chomsky (BC), linguists were more interested in description. Linguists were, at least in one view, people who could be dropped anywhere in the world, and emerge with a tentative grammar of the local language six months later. (A notion like this is mentioned early in this video.) Linguists catalog the myriad of strange details about human languages, like the fact that some languages don't appear to have words for relative directions, or "thank you", or "yes" and "no".

After Chomsky's domination of the field (AD), there were a lot more theorists. While you *could* study language by going out into the field and collecting data, this was viewed as not the only, and maybe not even the most important, way to work. Diagrams of sentences proliferated. Chomsky, arguably the most influential linguist of the past hundred years, has never done fieldwork.

In summary, to Chomsky and many of the linguists working in his tradition, the scientifically interesting component of language is grammar competence, and real linguistic data only indirectly reflects it.

All of this matters because the dominance of Chomskyan linguistics has had downstream effects in adjacent fields like artificial intelligence (AI), evolutionary biology, and neuroscience. Chomsky has long been an opponent of the statistical learning tradition of language modeling, essentially claiming that it does not provide insight about what humans know about languages, and that engineering success probably can't be achieved without explicitly incorporating important mathematical facts about the underlying structure of language. Chomsky's ideas have motivated researchers to look for a "language gene" and "language areas" of the brain. Arguably, no one has yet found either—but more on that later.

How Chomsky attained this stranglehold on linguistics is an interesting sociological question, but not our main concern in the present work.[10] The intent here is not to pooh-pooh Chomsky, either; brilliant and hard-working people are often wrong on important questions. Consider that his academic career began in the early 1950s—over 70 years ago!—when our understanding of language, anthropology, biology, neuroscience, and artificial intelligence, among many other things, was substantially more rudimentary.

---

[10] Chomsky's domination of linguistics is probably due to a combination of factors. First, he is indeed brilliant and prolific. Second, Chomsky's theories promised to 'unify' linguistics and make it more like physics and other 'serious' sciences; for messy fields like linguistics, I assume this promise is extremely appealing. Third, he helped create and successfully exploited the cognitive zeitgeist that for the first time portrayed the mind as something that can be scientifically studied in the same way that atoms and cells can. Moreover, he was one of the first to make interesting connections between our burgeoning understanding of fields like molecular biology and neuroscience on the one hand, and language on the other. Fourth, Chomsky was not afraid to get into fights, which can be beneficial if you usually win.

Where are we going with this? All of this is context for understanding the ideas of a certain bomb-throwing terrorist blight on the face of linguistics: Daniel Everett. *How Language Began* is a book he wrote about, well, what language is and how it began. Everett is the anti-Chomsky.

II. THE MISSIONARY

We all love classic boy-meets-girl stories. Here's one: boy meets girl at a rock concert, they fall in love, the boy converts to Christianity for the girl, then the boy and girl move to the Amazon jungle to dedicate the rest of their lives to saving the souls of an isolated hunter-gatherer tribe.

Daniel Everett is the boy in this story. The woman he married, Keren Graham, is the daughter of Christian missionaries and had formative experiences living in the Amazon jungle among the Sateré-Mawé people. At seventeen, Everett became a born-again Christian; at eighteen, he and Keren married; and over the next few years, they started a family and prepared to become full-fledged missionaries like Keren's parents.

First, Everett studied "Bible and Foreign Missions" at the Moody Bible Institute in Chicago. After finishing his degree in 1975, the natural next step was to train more specifically to follow in the footsteps of Keren's parents. In 1976, he and his wife enrolled in the Summer Institute of Linguistics (SIL) to learn translation techniques and more viscerally prepare for life in the jungle:

> They were sent to Chiapas, Mexico, where Keren stayed in a hut in the jungle with the couple's children—by this time, there were three—while Everett underwent grueling field training. He endured fifty-mile hikes and survived for several days deep in the jungle with only matches, water, a rope, a machete, and a flashlight.

Everett apparently had a gift for language-learning. This led SIL to invite Everett and his wife to work with the Pirahã people (pronounced pee-da-HAN), whose unusual language had thwarted all previous attempts to learn it. In 1977, Everett's family moved to Brazil, and in December they met the Pirahã for the first time. As an SIL-affiliated missionary, Everett's explicit goals were to (i) translate the Bible into Pirahã, and (ii) convert as many Pirahã as possible to Christianity.

But Everett's first encounter with the Pirahã was cut short for political reasons: (*Don't Sleep There Are Snakes*, Ch. 1, pg. 13-14)

> In December of 1977 the Brazilian government ordered all missionaries to leave Indian reservations. … Leaving the village under these forced circumstances made me wonder whether I'd ever be able to return. The Summer Institute of Linguistics was concerned too and wanted to find a way around the government's prohibition against missionaries. So SIL asked me to apply to the graduate linguistics program at the State University of Campinas (UNICAMP), in the state of São Paulo, Brazil. It was hoped that UNICAMP

> would be able to secure government authorization for me to visit the Pirahãs for a prolonged period, in spite of the general ban against missionaries. … My work at UNICAMP paid off as SIL hoped it would.

Everett became a linguist proper sort of by accident, mostly as an excuse to continue his missionary work. But he ended up developing a passion for it. In 1980, he completed *Aspects of the Phonology of Pirahã*, his master's thesis. He continued on to get a PhD in linguistics, also from UNICAMP, and in 1983 finished *The Pirahã Language and Theory of Syntax*, his dissertation. He continued studying the Pirahã and working as an academic linguist after that. In all, Everett spent around ten years of his life living with the Pirahã, spread out over some thirty-odd years. As he notes in *Don't Sleep, There Are Snakes*: (Prologue, pg. xvii-xviii)

> I went to the Pirahãs when I was twenty-six years old. Now I am old enough to receive senior discounts. I gave them my youth. I have contracted malaria many times. I remember several occasions on which the Pirahãs or others threatened my life. I have carried more heavy boxes, bags, and barrels on my back through the jungle than I care to remember. But my grandchildren all know the Pirahãs. My children are who they are in part because of the Pirahãs. And I can look at some of those old men (old like me) who once threatened to kill me and recognize some of the dearest friends I have ever had—men who would now risk their lives for me.

Everett interviewing some Pirahã people. (source)

Everett did eventually learn their language, and it's worth taking a step back to appreciate just how *hard* that task was. No Pirahã spoke Portuguese, apart from some isolated phrases they used for bartering. They didn't speak any other language at all—*just* Pirahã. How do you learn another group's language when you have no languages in common? The technical term is

monolingual fieldwork. But this is just a fancy label for some combination of pointing at things, listening, crude imitation, and obsessively transcribing whatever you hear. For *years*.

It doesn't help that the Pirahã language seems genuinely hard to learn in a few different senses. First, it is probably conventionally difficult for Westerners to learn since it is a tonal language (two tones: high and low) with a small number of phonemes (building block sounds) and a few unusual sounds[11]. Second, there is no written language. Third, the language has a variety of 'channels of discourse', or ways of talking specialized for one or another cultural context. One of these is 'whistle speech'; Pirahãs can communicate purely in whistles. This feature appears to be extremely useful during hunting trips: (*Don't Sleep, There Are Snakes*, Ch. 11, pg. 187-188)

> My first intense contact with whistle speech came one day when the Pirahãs had given me permission to go hunting with them. After we'd been walking for about an hour, they decided that they weren't seeing any game because I, with my clunking canteens and machete and congenital clumsiness, was making too much noise. "You stay here and we will be back for you later." Xaikáibaí said gently but firmly. …
>
> As I tried to make the best of my solitary confinement, I heard the men whistling to one another. They were saying, "I'll go over there; you go that way," and other such hunting talk. But clearly they were communicating. It was fascinating because it sounded so different from anything I had heard before. The whistle carried long and clear in the jungle. I could immediately see the importance and usefulness of this channel, which I guessed would also be much less likely to scare away game than the lower frequencies of the men's normal voices.

Fourth, important aspects of the language reflect core tenets of Pirahã culture in ways that one might not a priori expect. Everett writes extensively about the 'immediacy of experience principle' of Pirahã culture, which he summarizes as the idea that: (*Don't Sleep, There Are Snakes*, Ch. 7, pg. 132)

> *Declarative Pirahã utterances contain only assertions related directly to the moment of speech, either experienced by the speaker or witnessed by someone alive during the lifetime of the speaker.*

One way the language reflects this is that the speaker must specify how they know something by affixing an appropriate suffix to verbs: (*Don't Sleep, There Are Snakes,* Ch. 12, pg. 196)

> Perhaps the most interesting suffixes, however (though these are not unique to Pirahã), are what linguists call evidentials, elements that represent the speaker's evaluation of his or her knowledge of what he or she is saying. There are three of these in Pirahã: hearsay, observation, and deduction.

[11] One such sound is the bilabial trill, which kind of sounds like blowing a raspberry.

> To see what these do, let's use an English example. If I ask you, "Did Joe go fishing?" you could answer, "Yes, at least I heard that he did," or "Yes, I know because I saw him leave," or "Yes, at least I suppose he did because his boat is gone." The difference between English and Pirahã is that what English does with a sentence, Pirahã does with a verbal suffix.

Everett also convincingly links this cultural principle to the lack of Pirahã number words and creation myths. On the latter topic, Everett recalls the following exchange: (*Don't Sleep, There Are Snakes,* Ch. 7, pg. 134)

> I sat with Kóhoi once and he asked me, after hearing about my god, "What else does your god do?" And I answered, "Well, he made the stars, and he made the earth." Then I asked, "What do the Pirahãs say?" He answered, "Well, the Pirahãs say that these things were not made."

And all of this is to say nothing of the manifold perils of the jungle: malaria, typhoid fever, dysentery, dangerous snakes, insects, morally gray river traders, and periodic downpours. If Indiana Jones braved these conditions for years, we would consider his stories rousing adventures. Everett did this while *also* learning one of the most unusual languages in the world.

People on the bank of the Maici river. (source)

By the way, he did eventually sort of achieve his goal of translating the Bible. Armed with a solid knowledge of Pirahã, he was able to translate the New Testament's Gospel of Mark. Since the Pirahã have no written language, he provided them with a recorded version, but did not get the reaction he expected: (*Don't Sleep, There Are Snakes*, Ch. 17, pg. 267-268)

> When we returned to the village, I recorded Mark's gospel in my own voice for the Pirahãs to listen to. I then brought in a wind-up tape recorder to play the recording, and I taught the Pirahãs how to use it, which, surprisingly enough, some of the children did.

> Keren and I left the village and returned a few weeks later. The people were still listening to the gospel, with children cranking the recorder. I was initially quite excited about this, until it became clear that the only part of the book that they paid attention to was the beheading of John the Baptist. “Wow, they cut off his head. Play that again!”

One reaction to hearing the gospel caught Everett even more off-guard: (*Don’t Sleep, There Are Snakes*, Ch. 17, pg. 269)

> "The women are afraid of Jesus. We do not want him."
> "Why not?" I asked, wondering what had triggered this declaration.
> "Because last night he came to our village and tried to have sex with our women. He chased them around the village, trying to stick his large penis into them."
>
> Kaaxaóoi proceeded to show me with his two hands held far apart how long Jesus's penis was—a good three feet.

But the Pirahã had an even more serious objection to Jesus: (*Don’t Sleep, There Are Snakes*, Ch. 17, pg. 265-266)

> Part of the difficulty of my task began to become clear to me. I communicated more or less correctly to the Pirahãs about my Christian beliefs. The men listening to me understood that there was a man named Hisó, Jesus, and that he wanted others to do what he told them.
>
> "The Pirahã men then asked, "Hey Dan, what does Jesus look like? Is he dark like us or light like you?" I said, "Well, I have never actually seen him. He lived a long time ago. But I do have his words." "Well, Dan, how do you have his words if you have never heard him or seen him?"
>
> They then made it clear that if I had not actually seen this guy (and not in any metaphorical sense, but literally), they weren't interested in any stories I had to tell about him. Period. This is because, as I now knew, the Pirahãs believe only what they see. Sometimes they also believe in things that someone else has told them, so long as that person has personally witnessed what he or she is reporting.

In the end, Everett never converted a single Pirahã. But he did even worse than converting zero people—he lost his own faith after coming to believe that the Pirahã had a good point. After keeping this to himself for many years, he revealed his loss of faith to his family, which led to a divorce and his children breaking contact with him for a number of years afterward.

But Everett losing his faith in the God of Abraham was only the beginning. Most importantly for us, he *also* lost his faith in the God of Linguistics—Noam Chomsky.

III. THE WAR

In 2005, Everett's paper "Cultural constraints on grammar and cognition in Pirahã: Another look at the design features of human language" was published in the journal *Cultural Anthropology*. An outsider might expect an article like this, which made a technical observation about the apparent lack of a property called 'recursion' in the Pirahã language, to receive an 'oh, neat' sort of response. Languages can be pretty different from one another, after all. Mandarin lacks plurals. Spanish sentences can omit an explicit subject. This is one of those kinds of things.

But the article ignited a firestorm of controversy that follows Everett to this day. Praise for Everett and his work on recursion in Pirahã:

> He became a pure charlatan, although he used to be a good descriptive linguist. That is why, as far as I know, all the serious linguists who work on Brazilian languages ignore him.
>
> - Noam Chomsky, MIT professor and linguist

> You, too, can enjoy the spotlight of mass media and closet exoticists! Just find a remote tribe and exploit them for your own fame by making claims nobody will bother to check!
>
> - Andrew Nevins, UCL professor and linguist (Harvard professor at quote time)

> I think he knows he's wrong, that's what I really think. I think it's a move that many, many intellectuals make to get a little bit of attention.
>
> - Tom Roeper, U. Mass. Amherst professor and linguist

> Everett is a racist. He puts the Pirahã on a level with primates.
>
> - Cilene Rodrigues, PUC-Rio professor and linguist

> Is Daniel Everett the village idiot of linguistics?
>
> - bedobi, Redditor

Apparently he struck a nerve. And there is much more vitriol like this; see Pullum for the best (short) account of the beef I've found, along with sources for each quote except the last. On the whole affair, he writes:

> Calling it a controversy or debate would be an understatement; it was a campaign of vengeance and career sabotage.

I'm not going to rehash all of the details, but the conduct of many in the pro-Chomsky faction is pretty shocking. Highly recommended reading. Substantial portions of the books *The Kingdom of Speech* and *Decoding Chomsky* are also dedicated to covering the beef and related issues, although I haven't read them.

What's going on? Assuming Everett is indeed acting in good faith, why did he get this reaction? As I said in the beginning, linguists are those who believe Noam Chomsky is the rightful caliph. Central to Chomsky's conception of language is the idea that grammar reigns supreme, and that human brains have some specialized structure for learning and processing grammar. In the writing of Chomsky and others, this hypothetical component of our biological endowment is sometimes called the narrow faculty of language (FLN); this is to distinguish it from other (e.g., sensorimotor) capabilities relevant for practical language use.

A paper by Hauser, Chomsky, and Fitch titled "The Faculty of Language: What Is It, Who Has It, and How Did It Evolve?" was published in the prestigious journal *Science* in 2002, just a few years earlier. The abstract contains the sentence:

> We hypothesize that FLN only includes recursion and is the only uniquely human component of the faculty of language.

Some additional context is that Chomsky had spent the past few decades simplifying his theory of language. A good account of this is provided in the first chapter of *Chomsky's Universal Grammar: An Introduction*. By 2002, arguably not much was left: the core claims were that (i) grammar is supreme, (ii) all grammar is recursive and hierarchical. More elaborate aspects of previous versions of Chomsky's theory, like the idea that each language might be identified with different parameter settings of some 'global' model constrained by the human brain (the core idea of the so-called 'principles and parameters' formulation of universal grammar), were by now viewed as helpful and interesting but not necessarily fundamental.

Hence, it stands to reason that evidence suggesting *not all* grammar is recursive could be perceived as a significant threat to the Chomskyan research program. If not all languages had recursion, then what would be left of Chomsky's once-formidable theoretical apparatus?

Everett's paper inspired a lively debate, with many arguing that he is lying, or misunderstands his own data, or misunderstands Chomsky, or some combination of all of those things. The most famous anti-Everett response is "Pirahã Exceptionality: A Reassessment" by Nevins, Pesetsky, and Rodrigues (NPR), which was published in the prestigious journal *Language* in 2009. This paper got a response from Everett, which led to an NPR response-to-the-response.

To understand how contentious even the *published* form of this debate became, I reproduce in full the final two paragraphs of NPR's response-response:

> We began this commentary with a brief remark about the publicity that has been generated on behalf of Everett's claims about Pirahã. Although reporters and other nonlinguists may be aware of some 'big ideas' prominent in the field, the outside world is largely unaware of one of the most fundamental achievements of modern linguistics: the three-fold discovery that (i) there is such a thing as a FACT about language; (ii) the facts of language pose PUZZLES, which can be stated clearly and precisely; and (iii) we can propose and evaluate SOLUTIONS to these puzzles, using the same intellectual skills

> that we bring to bear in any other domain of inquiry. This three-fold discovery is the common heritage of all subdisciplines of linguistics and all schools of thought, the thread that unites the work of all serious modern linguists of the last few centuries, and a common denominator for the field.
>
> In our opinion, to the extent that CA and related work constitute a 'volley fired straight at the heart' of anything, its actual target is no particular school or subdiscipline of linguistics, but rather ANY kind of linguistics that shares the common denominator of fact, puzzle, and solution. That is why we have focused so consistently on basic, common-denominator questions: whether CA's and E09's conclusions follow from their premises, whether contradictory published data has been properly taken into account, and whether relevant previous research has been represented and evaluated consistently and accurately. To the extent that outside eyes may be focused on the Pirahã discussion for a while longer, we would like to hope that NP&R (and the present response) have helped reinforce the message that linguistics is a field in which robustness of evidence and soundness of argumentation matter.

Two observations here. First, another statement about "serious" linguistics; why does that keep popping up? Second, *wow*. That's the closest you can come to cursing someone out in a prestigious journal.

Polemics aside, what's the technical content of each side's argument? Is Pirahã recursive or not? Much of the debate appears to hinge on two things:

- what one means by *recursion*
- what one means by the statement "All natural human languages have recursion."

Everett generally takes recursion to refer to the following property of many natural languages: one can construct sentences or phrases from other sentences and phrases. For example:

"The cat died." -> "Alice said that [the cat died]." -> "Bob said that [Alice said that [the cat died.]]"

In the above example, we can in principle generate infinitely many new sentences by writing "Z said X," where X is the previous sentence and Z is some name. For clarity's sake, one should probably distinguish between different ways to generate new sentences or phrases from old ones; Pullum mentions a few in the context of assessing Everett's Pirahã recursion claims:

> Everett reports that there are no signs of no multiple coordination (*It takes [skill, nerve, initiative, and courage]*), complex determiners (*[[[my] son's] wife's] family*), stacked modifiers (*a [nice, [cosy, [inexpensive [little cottage]]]]*), or—most significant of all—reiterable clause embedding (*I thought [you already knew [that she was here]]*). These are the primary constructions that in English permit sentences of any arbitrary finite length to be constructed, yielding the familiar argument that the set of all definable grammatical sentences in English is infinite.

Regardless of the details, a generic prediction should be that there is no longest sentence in a language whose grammar is recursive. This doesn't mean that one can say an arbitrarily long sentence in real life[12]. Rather, one can say that, given a member of some large set of sentences, one can always extend it.

Everett takes the claim "All natural human languages have recursion." to mean that, if there exists a natural human language without recursion, the claim is false. Or, slightly more subtly, if there exists a language which uses recursion so minimally that linguists have a hard time determining whether a corpus of linguistic data falsifies it or not, sentence-level recursion is probably not a bedrock principle of human languages.

I found the following anecdote from a 2012 paper of Everett's enlightening:

> Pirahã speakers reject constructed examples with recursion, as I discovered in my translation of the gospel of Mark into the language (during my days as a missionary). The Bible is full of recursive examples, such as the following, from Mark 1:3:
>
> '(John the Baptist) was a voice of one calling in the desert…'
>
> I initially translated this as:
>
> 'John, the man that put people in the water in order to clean them for God, that lived in a place like a beach with no trees and that yelled for people to obey God'.
>
> The Pirahãs rejected every attempt until I translated this as:
>
> 'John cleaned people in the river. He lived in another jungle. The jungle was like a beach. It had no trees. He yelled to people. You want God!'
>
> The non-recursive structure was accepted readily and elicited all sorts of questions. I subsequently realized looking through Pirahã texts that there were no clear examples involving either recursion or even embedding. Attempts to construct recursive sentences or phrases, such as 'several big round barrels', were ultimately rejected by the Pirahãs (although initially they accepted them to be polite to me, a standard fieldwork problem that Jeanette Sakel and I discuss).

He does explicitly claim (in the aforementioned paper and elsewhere) that Pirahã probably has no longest sentence, which is about the most generic anti-recursion statement one can make.

Chomsky and linguists working in his tradition sometimes write in a way consistent with Everett's conception of recursion, but sometimes don't. For example, consider this random 2016 blogpost I found by a linguist in training:

---

[12] This reminds me of a math joke.

> For generative linguistics the recursive function is Merge, which combines two words or phrases to form a larger structure which can then be the input for further iterations of Merge. Any expression larger than two words, then, requires recursion, regardless of whether there is embedding in that expression. For instance the noun phrase “My favourite book” requires two iterations of Merge, (Merge(favourite, book)= [Favourite book], Merge(my, [favourite book])= [my [favourite book]]) and therefore is an instance of recursion without embedding.

To be clear, this usage of ‘recursion’ seems consistent with how many other Chomskyan linguists have used the term. And with all due respect to these researchers, I find this notion of recursion completely insane, because it would imply (i) any language with more than one word in its sentences has recursion, and that (ii) all sentences are necessarily constructed recursively.

The first implication means that “All natural human languages have recursion.” reduces to the vacuously true claim that “All languages allow more than one word in their sentences.”[13] The second idea is more interesting, because it relates to how the brain constructs sentences, but as far as I can tell this claim cannot be tested using purely observational linguistic data. One would have to do some kind of experiment to check the order in which subjects mentally construct sentences, and ideally make brain activity measurements of some sort.

Aside from sometimes involving a strange notion of recursion, another feature of the Chomskyan response to Everett relates to the distinction we discussed earlier between so-called E-languages and I-languages. Consider the following exchange from a 2012 interview with Chomsky:

> **NS:** But there are critics such as Daniel Everett, who says the language of the Amazonian people he worked with seems to challenge important aspects of universal grammar.
>
> **Chomsky:** It can't be true. These people are genetically identical to all other humans with regard to language. They can learn Portuguese perfectly easily, just as Portuguese children do. So they have the same universal grammar the rest of us have. What Everett claims is that the resources of the language do not permit the use of the principles of universal grammar.
>
> That's conceivable. You could imagine a language exactly like English except it doesn't have connectives like "and" that allow you to make longer expressions. An infant learning truncated English would have no idea about this: they would just pick it up as they would standard English. At some point, the child would discover the resources are so limited you can't say very much, but that doesn't say anything about universal grammar, or about language acquisition.

[13] Why is this vacuously true? If, given some particular notion of ‘sentence’, the sentences of any language could only have one word at most, we would just define some other notion of ‘word collections’.

Chomsky makes claims like this elsewhere too. The argument is that, even if there *were* a language without a recursive grammar, this is not inconsistent with his theory, since his theory is not about E-languages like English or Spanish or Pirahã. His theory *only* makes claims about I-languages, or equivalently about our innate language capabilities.

But this is kind of a dumb rhetorical move. Either the theory makes predictions about real languages or it doesn't. The statement that *some* languages in the world are arguably recursive is not a prediction; it's an observation, and we didn't need the theory to make it. What does it *mean* for the grammar of thought languages to be recursive? How do we test this? Can we test it by doing experiments involving real linguistic data, or not? If not, are we even still talking about language?

To this day, as one might expect, not everyone agrees with Everett that (i) Pirahã lacks a recursive hierarchical grammar, and that (ii) such a discovery would have any bearing at all on the truth or falsity of Chomskyan universal grammar. Given that languages can be pretty weird, among other reasons, I am inclined to side with Everett here. But where does that leave us? We do not *just* want to throw bombs and tell everyone their theories are wrong.

Does Everett have an alternative to the Chomskyan account of what language is and where it came from? Yes, and it turns out he's been thinking about this for a long time. *How Language Began* is his 2017 offering in this direction.

IV. THE BOOK

So what *is* language, anyway?

Everett writes: (*How Language Began*, Ch. 1, pg. 15)

> Language is the interaction of meaning (semantics), conditions on usage (pragmatics), the physical properties of its inventory of sounds (phonetics), a grammar (syntax, or sentence structure), phonology (sound structure), morphology (word structure), discourse conversational organizational principles, information, and gestures. Language is a gestalt—the whole is greater than the sum of its parts. That is to say, the whole is not understood merely by examining individual components.

Okay, so far, so good. To the uninitiated, it looks like Everett is just listing all of the different things that are involved in language; so what? The point is that language is more than just grammar. He goes on to say this explicitly: (*How Language Began*, Ch. 1, pg. 16)

> Grammar is a tremendous aid to language and also helps in thinking. But it really is at best only a small part of any language, and its importance varies from one language to

> another. There are tongues that have very little grammar and others in which it is extremely complex.

His paradigmatic examples here are Pirahã and Riau Indonesian, which appears to lack a hierarchical grammar, and which moreover apparently lacks a clear noun/verb distinction. You might ask: *what does that even mean*? I'm not 100% sure, since the linked Gil chapter appears formidable, but Wikipedia gives a pretty good example in the right direction:

> For example, the phrase *Ayam makan* (lit. 'chicken eat') can mean, in context, anything from 'the chicken is eating', to 'I ate some chicken', 'the chicken that is eating' and 'when we were eating chicken'

Is "chicken" the subject of the sentence, the object of the sentence, or something else? Well, it depends on the context.

What's the purpose of language? Communication: (*How Language Began*, Introduction, pg. 5)

> Indeed, language changes lives. It builds society, expresses our highest aspirations, our basest thoughts, our emotions and our philosophies of life. But all language is ultimately at the service of human interaction. Other components of language—things like grammar and stories—are secondary to conversation.

Did language emerge suddenly, as it does in Chomsky's proposal, or gradually? Very gradually: (*How Language Began*, Introduction, pg. 7-8)

> There is a wide and deep linguistic chasm between humans and all other species. … More likely, the gap was formed by baby steps, by homeopathic changes spurred by culture. Yes, human languages are dramatically different from the communication systems of other animals, but the cognitive and cultural steps to get beyond the 'language threshold' were smaller than many seem to think. The evidence shows that there was no 'sudden leap' to the uniquely human features of language, but that our predecessor species in the genus *Homo* and earlier, perhaps among the australopithecines, slowly but surely progressed until humans achieved language. This slow march taken by early hominins resulted eventually in a yawning evolutionary chasm between human language and other animal communication.

So far, we have a bit of a nothingburger. Language is for communication, and probably—like everything else!—emerged gradually over a long period of time. While these points are interesting as a contrast to Chomsky, they are not that surprising in and of themselves.

But Everett's work goes beyond taking the time to bolster common sense ideas on language origins. Two points he discusses at length are worth briefly exploring here. First, he offers a much more specific account of the emergence of language than Chomsky does, and draws on a

mix of evidence from paleoanthropology, evolutionary biology, linguistics, and more. Second, he pretty firmly takes the Anti-Chomsky view on whether language is innate: (Preface, pg. xv)

> … I deny here that language is an instinct of any kind, as I also deny that it is innate, or inborn.

These two points are not unrelated. Everett's core idea is that language should properly be thought of as an *invention* rather than an *innate human capability*. You might ask: who invented it? Who shaped it? Lots of people, collaboratively, over a long time. In a word, *culture*. As Everett notes in the preface, "*Language is the handmaiden of culture.*"

In any case, let's discuss these points one at a time. First: the origins of language. There are a number of questions one might want to answer about how language began:

- In what order did different language-related concepts and components emerge?
- When did language proper first arise?
- What aspects of human biology best explain why and how language emerged?

To Everett, the most important feature of language is not grammar or any particular properties of grammar, but the fact that it involves communication using *symbols*. What are symbols? (Ch. 1, pg. 17)

> Symbols are conventional links to what they refer to. They … need not bear any resemblance to nor any physical connection to what they refer to. They are agreed upon by society.

There are often rules for arranging symbols, but given how widely they can vary in practice, Everett views such rules as interesting but not fundamental. One can have languages with few rules (e.g., Riau) or complex rules (e.g., German); the key requirement for a language is that symbols are used to convey meaning.

Where did symbols come from? To address this question, Everett adapts a theory due to the (in his view underappreciated) American polymath Charles Sanders Peirce: *semiotics*, the theory of signs. What are signs? (Ch. 1, pg. 16)

> A sign is any pairing of a form (such as a word, smell, sound, street sign, or Morse code) with a meaning (what the sign refers to).

Everett, in the tradition of Peirce, distinguishes between various different types of signs. The distinction is based on (i) whether the pairing is intentional, and (ii) whether the form of the sign is arbitrary. *Indexes* are non-intentional, non-arbitrary pairings of form and meaning (think: dog paw print). *Icons* are intentional, non-arbitrary pairings of form and meaning (think: a drawing of a dog paw print). *Symbols* are intentional, arbitrary pairings (think: the word "d o g" refers to a particular kind of real animal, but does not resemble anything about it).

Everett argues that symbols did not appear out of nowhere, but rather arose from a natural series of abstractions of concepts relevant to early humans. The so-called ‘semiotic progression’ that ultimately leads to symbols looks something like this:

indexes (dog paw print) -> icons (drawing of dog paw print) -> symbols (“d o g”)

This reminds me of what little I know about how written languages changed over time. For example, many Chinese characters used to look a lot more like the things they represented (icon-like), but became substantially more abstract (symbol-like) over time:

Eight examples of how Chinese characters have changed over time. (source)

For a given culture and concept, the icon-to-symbol transition could’ve happened any number of ways. For example, early humans could’ve mimicked an animal’s cry to refer to it (icon-like, since this evokes a well-known physical consequence of some animal’s presence), but then gradually shifted to making a more abstract sound (symbol-like) over time.

The index (non-intentional, non-arbitrary) to icon transition must happen even earlier. This refers to whatever process led early humans to, for example, mimic a given animal’s cry in the first place, or to draw people on cave walls, or to collect rocks that resemble human faces.

Is there a clear boundary between indexes, icons, and symbols? It doesn’t *seem* like it, since things like Chinese characters changed gradually over time. But Everett doesn’t discuss this point explicitly.

Why did we end up with certain symbols and not others? Well, there's no good a priori reason to prefer "dog" over "perro" or "adsnofnowefn", so Everett attributes the selection mostly to cultural forces. Everett suggests these forces shape language in addition to practical considerations, like the fact that, all else being equal, we prefer words that are not hundreds of characters long, because they would be too annoying to write or speak.

When did language—in the sense of communication using symbols—begin? Everett makes two kinds of arguments here. One kind of argument is that certain feats are hard enough that they probably required language in this sense. Another kind of argument relates to how we know human anatomy has physically changed on evolutionary time scales.

The feats Everett talks about are things like traveling long distances across continents, possibly even in a directed rather than random fashion; manufacturing nontrivial hand tools (e.g., Oldowan and Mousterian); building complex settlements (e.g., the one found at Gesher Benot Ya'aqov); controlling fire; and using boats to successfully navigate treacherous waters. Long before *sapiens* arose, paleoanthropological evidence suggests that our predecessors *Homo erectus* did all of these things. Everett argues that they might have had language over one million years ago.[14]

This differs from Chomsky's proposal by around an order of magnitude, time-wise, and portrays language as something not necessarily unique to modern humans. In Everett's view, *Homo sapiens* probably *improved* on the language technology bestowed upon them by their *erectus* ancestors, but did not invent it.

Everett's anatomy arguments relate mainly to the structure of the head and larynx (our 'voice box', an organ that helps us flexibly modulate the sounds we produce). Over the past two million years, our brains got bigger, our face and mouth became more articulate, our larynx changed in ways that gave us a clearer and more elaborate inventory of sounds, and our ears became better tuned to hearing those sounds. Here's the kind of thing Everett writes on this topic: (Ch. 5, pg. 117)

> *Erectus* speech perhaps sounded more garbled relative to that of *sapiens*, making it harder to hear the differences between words. … Part of the reason for *erectus*'s probably mushy speech is that they lacked a modern hyoid (Greek for 'U-shaped') bone, the small bone in the pharynx that anchors the larynx. The muscles that connect the hyoid to the larynx use their hyoid anchor to raise and lower the larynx and produce a wider variety of speech sounds. The hyoid bone of *erectus* was shaped more like the hyoid bones of the other great apes and had not yet taken on the shape of *sapiens*' and *neanderthalensis*' hyoids (these two being virtually identical).

Pretty neat and not something I would've thought about.

---

[14] He and archaeologist Lawrence Barham provide a more self-contained argument in this 2020 paper.

What aspects of biology best explain all of this? Interestingly, at no point does Everett require anything like Chomsky's faculty of language; his view is that language was primarily enabled by early humans being smart enough to make a large number of useful symbol-meaning associations, and social enough to perpetuate a nontrivial culture. Everett thinks cultural pressures forced humans to evolve bigger brains and better communications apparatuses (e.g., eventually giving us modern hyenoid bones to support clearer speech), which drove culture to become richer, which drove yet more evolution, and so on.

Phew. Let's go back to the question of innateness before we wrap up.

Everett's answer to the innateness question is complicated and in some ways subtle. He agrees that certain features of the human anatomy evolved to support language (e.g., the pharynx and ears). He also agrees that modern humans are probably much better than *Homo erectus* at working with language, if indeed *Homo erectus* did have language.

He mostly seems to take issue with the idea that some region of our brain is specialized for language. Instead, he thinks that our ability to produce and comprehend language is due to a mosaic of generally-useful cognitive capabilities, like our ability to remember things for relatively long times, our ability to form and modify habits, and our ability to reason under uncertainty. This last capability seems particularly important since, as Everett points out repeatedly, most language-based communication is ambiguous, and it is important for participants to exploit cultural and contextual information to more reliably infer the intended messages of their conversation partners. Incidentally, this is a feature of language Chomskyan theory tends to neglect.[15]

Can't lots of animals do all those things? Yes. Everett views the difference as one of degree, not necessarily of quality.

What about language genes like FOXP2 and putative language areas like Broca's and Wernicke's areas? What about specific language impairments? Aren't they clear evidence of language-specific human biology? Well, FOXP2 appears to be more related to speech *control*—a motor task. Broca's and Wernicke's areas are both involved in coordinating motor activity unrelated to speech. Specific language impairments, contrary to their name, also involve some other kind of deficit in the cases known to Everett.

I have to say, I am not *100%* convinced by the brain arguments. I mean, *come on*, look at the videos of people with Broca's aphasia or Wernicke's aphasia. Also, I buy that Broca's and Wernicke's areas (or whatever other putative language areas are out there) are active during non-language-related behavior, or that they represent non-language-related variables. But this

[15] A famous line at the beginning of Chomsky's *Aspects of the Theory of Syntax* goes: "Linguistic theory is concerned primarily with an ideal speaker-listener, in a completely homogeneous speech community, who knows its language perfectly and is unaffected by such grammatically irrelevant conditions as memory limitations, distractions, shifts of attention and interest, and errors (random or characteristic) in applying his knowledge of the language in actual performance."

is also true of *literally every other* area we know of in the brain, including well-studied sensory areas like the primary visual cortex. It's no longer news when people find variable X encoded in region Y-not-typically-associated-with-X.

Still, I can't dismiss Everett's claim that there is no language-specific brain area. At this point, it's hard to tell. The human brain is complicated, and there remains much that we don't understand.

Overall, Everett tells a fascinatingly wide-ranging and often persuasive story. If you're interested in what language is and how it works, you should read *How Language Began*. There's a lot of interesting stuff in there I haven't talked about, especially for someone unfamiliar with at least one of the areas Everett covers (evolution, paleoanthropology, theoretical linguistics, neuroanatomy, …). Especially fun are the chapters on aspects of language I don't hear people talk about as much, like gestures and intonation.

As I've tried to convey, Everett is well-qualified to write something like this, and has been thinking about these topics for a long time. He's the kind of linguist most linguists wish they could be, and he's worth taking seriously, even if you don't agree with everything he says.

V. THE REVELATIONS

I want to talk about large language models now. Sorry. But you know I had to do this.

Less than two years ago at the time of writing, the shocking successes of ChatGPT put many commentators in an awkward position. Beyond all the quibbling about details (Does ChatGPT really understand? Doesn't it fail at many tasks trivial for humans? Could ChatGPT or something like it be conscious?), the brute empirical fact remains that it can handle language comprehension and generation pretty well. And this is despite the conception of language underlying it—language use as a statistical learning problem, with no sentence diagrams or grammatical transformations in sight—being somewhat antithetical to the Chomskyan worldview.

Chomsky has frequently criticized the statistical learning tradition, with his main criticisms seeming to be that (i) statistical learning produces systems with serious defects, and (ii) succeeding at engineering problems does not tell us anything interesting about how the human brain handles language. These are reasonable criticisms, but I think they are essentially wrong.

Statistical approaches succeeded where more directly-Chomsky-inspired approaches failed, and it was never close. Large language models (LLMs) like ChatGPT are not perfect, but they're getting better all the time, and the onus is on the critics to explain where they think the wall is. It's *conceivable* that a completely orthogonal system designed according to the principles of

universal grammar could outperform LLMs built according to the current paradigm—but this possibility is becoming vanishingly unlikely.

Why do statistical learning systems handle language so well? If Everett is right, the answer is in part because (i) training models on a large corpus of text and (ii) providing human feedback both give models a rich collection of what is essentially *cultural* information to draw upon. People like talking with ChatGPT not just because it knows things, but because it can talk like them. And that is only possible because, like humans, it has witnessed and learned from many, many, many conversations between humans.

Statistical learning also allows these systems to appreciate context and reason under uncertainty, at least to some extent, since both of these are crucial factors in many of the conversations that appear in training data. These capabilities would be extremely difficult to implement by hand, and it's not clear how a more Chomskyan approach would handle them, even if some kind of universal-grammar-based latent model otherwise worked fairly well.

Chomsky's claim that engineering success does not necessarily produce scientific insight is not uncommon, but a large literature speaks against it. And funnily enough, given that he is ultimately interested in the mind, engineering successes have provided some of our *most powerful tools* for interrogating what the mind might look like.

The rub is that artificial systems engineered to perform some particular task well are not black boxes; we can look inside them and tinker as we please. Studying the internal representations and computations of such networks has provided neuroscience with crucial insights in recent years, and such approaches are particularly helpful given how costly neuroscience experiments (which might involve, e.g., training animals and expensive recording equipment) can be. Lots of recent computational neuroscience follows this blueprint: build a recurrent neural network to solve a task neuroscientists study, train it somehow, then study its internal representations to generate hypotheses about what the brain might be doing.

In principle, (open-source) LLMs and their internal representations can be interrogated in precisely the same way. I'm not sure what's been done already, but I'm confident that work along these lines will become more common in the near future. Given that high-quality recordings of neural dynamics during natural language use are hard to come by, studying LLMs might be essential for understanding human-language-related neural computations.

When we peer inside language-competent LLMs, what will we find? This is a topic Everett doesn't have much to say about, and on which Chomsky might actually be right. Whether we're dealing with the brain or artificial networks, we can talk about the same thing at many different levels of description. In the case of the brain, we might talk in terms of interacting molecules, networks of electrically active neurons, or very many other effective descriptions. In the case of artificial networks, we can either talk about individual 'neurons', or some higher-level description that better captures the essential character of the underlying algorithm.

Maybe LLMs, at least when trained on data from languages whose underlying rules can be parsimoniously described using universal grammar, effectively exploit sentence diagrams or construct recursive hierarchical representations of sentences using an operation like Merge. It's still possible that formalisms like Chomsky's provide a useful way of *talking about* what LLMs do, if anything like that is true. Such descriptions might be said to capture the 'mind' of an LLM, since from a physicalist perspective the 'mind' is just a useful way of talking about a complex system of interacting neurons.

Regardless of who's right and who's wrong, the study language is certainly interesting and we have a lot more to learn. Something Chomsky wrote in 1968 seems like an appropriate summary of the way forward: (*Language and Mind*, pg. 1)

> I think there is more of a healthy ferment in cognitive psychology—and in the particular branch of cognitive psychology known as linguistics—than there has been for many years. And one of the most encouraging signs is that skepticism with regard to the orthodoxies of the recent past is coupled with an awareness of the temptations and dangers of premature orthodoxy, an awareness that, if it can persist, may prevent the rise of new and stultifying dogma.
>
> It is easy to be misled in an assessment of the current scene; nevertheless, it seems to me that the decline of dogmatism and the accompanying search for new approaches to old and often still intractable problems are quite unmistakable, not only in linguistics but in all of the disciplines concerned with the study of mind.

How the War Was Won – by Phillips Payson O'Brien

To a first approximation, there are a million books about World War II. Why should you care about *How the War Was Won* (hereinafter "HtWWW") by Phillips Payson O'Brien?

- It provides a new, transformative view of the conflict by focusing on production of key goods and what affected that production instead of the ups and downs of battles at the front.

- That particular lens used can (and should) be applied outside of just World War II, and you can get a feel for how that might be done by reading HtWWW.

- I have lectured about World War II and read many, many books about it. I have never texted friends more excerpts of a book than this one.

I have some criticisms of HtWWW, but if the criticisms dissuade you from reading the book, I will have failed. These complaints are like tut-tutting Einstein's penmanship.

The Wikipedia-Level Story of World War II (and O'Brien's Counterargument)

To understand why O'Brien's argument is so novel, you need to know the modern-day conventional understanding of the story of World War II. Here is my summary of the conventional narrative of World War II:

- Germany conquered Poland and France. It tried to bomb the UK into submission/maybe enable an invasion. That effort failed when Germany was defeated in the Battle of Britain, thanks largely to the plucky efforts of British airmen (memorably summarized by Winston Churchill: "Never in the field of human conflict was so much owed by so many to so few.")

- Stymied in the West, Germany invaded the Soviet Union, won a bunch of crushing victories, but then got turned back at the gates of Moscow. The Soviets moved all of their factories east of the Ural Mountains and produced a vast tide of T-34 tanks that overpowered the Germans.

- The Germans suffered a catastrophic defeat at Stalingrad and a bloody strategic defeat at Kursk, after which the Soviets relentlessly pounded Germany to defeat.

- The US and the UK sent a lot of material help and eventually fought the Germans too, most notably in the D-Day invasion and the Battle of the Bulge. However, most of the fighting was done by the Soviets.

- It is very difficult to say how important the aerial bombing campaigns of the Western Allies were in defeating Germany. The Germans moved much of their production underground, insulating them from truly disastrous effects.

- The U.S. mostly fought alone against Japan, which won a series of impressive early victories (e.g., Pearl Harbor, the conquest of Singapore) until the decisive Battle of Midway, after which the vastly larger US industrial base outproduced Japan into oblivion.

- The US bombed the Japanese into submission by destroying Japanese cities, ultimately by dropping atom bombs on Hiroshima and Nagasaki.

By examining where the Axis focused their productive capacities and how the Allies disrupted those capacities, O'Brien challenges virtually every part of that narrative:

- The Battle of Britain was not a close-run thing. The fact that British fighter planes were flying over their own territory meant their attrition rate of pilots and aircraft were far lower than the Germans'.

- American and British bombing mattered far more to the war's outcome than the battles of the Eastern Front, which consumed a much smaller portion of German expenditures.

- American and British airpower made German battlefield victories on the Western Front virtually impossible and dramatically limited the force Germany could bring to bear in the East.

- Japan (really, Japan plus the giant empire it conquered at the beginning of the war) was an industrial behemoth to rival the Soviet Union. However, the destruction of the Japanese merchant fleet by American air and sea forces wrecked Japan's economy.

- The firebombing of Japanese cities and the atomic bombings of Hiroshima and Nagasaki had an ambiguous strategic effect. American air power played a much more important role in severing Japan from the natural resources it had conquered in the early part of the war.

Battles are Overrated

Take another look at the conventional narrative. Almost every key event involves a *battle*, a period of time in a relatively localized area where combatants slugged it out to see who would occupy some bit of land or sea. To O'Brien, this focus is silly, a relic of long-ago wars in ages with far less industrial capacity.

Start with theory. States fight to impose their will on another state in pursuit of some political goal. To do that requires that they achieve sufficient local military superiority that the other state can't stop them from achieving their political goal.

Nazi Germany wanted to be the new administrators of the agricultural area of the western Soviet Union. To do that, they had to evict the Soviet military, whether through direct destruction or forcing the Soviet government to withdraw their armed forces. Individual battles for control of a localized area only matter if they are a means to that end.

Does the occupation or non-occupation of that point on the map affect the ability of a combatant to keep fighting?

In some limited cases, yes. Battlefield victory enabled Germany to overrun France before France could really focus its productive effort on the war. After their surrender, the French could not produce weapons, and they functionally could not organize their manpower to fight the Germans. But if the German army conquered, say, a random city in the Soviet Union, like Stalingrad, Soviet production and manpower was barely affected. The war goes on.

In theory, the German army could destroy *so much* of the Soviet military in one battle (or even a few discrete battles) that the Soviets run out of men or weapons. If there was ever a time this could have happened, it would have been the German invasion of the Soviet Union in 1941, when the Germans basically won a series of crushing victories.

The problem for the Germans was that by World War II, people in the combatant countries were good at building stuff in vast quantities, and the major combatants of World War II generally had access to sufficient natural resources. **Even massive armies could not destroy produced weapons systems (e.g., tanks, airplanes) on the battlefield fast enough to remove the other side's ability to continue fighting. What *could* (and did) happen was the destruction of the other side's ability to produce and distribute weapons.**

Sure enough, if you look at the actual data from even the largest battles, neither side really destroys a hugely significant amount of stuff. Take the Battle of Kursk—the largest

tank and air battle of World War II. Wikipedia will dazzle you with the numbers of soldiers involved (millions), tanks deployed (in the ballpark of 10,000), and aircraft in the sky (in the ballpark of 5,000).

In this entire vast battle that supposedly dictated the outcome of the Eastern Front, the Germans lost approximately 350 armored fighting vehicles (AFVs) during the most intense 10 days of fighting. In the two months around when the battle took place, the Germans lost 1,331 AFVs on the entire Eastern Front. In the year of the battle, 1943, the Germans built more than 12,000 AFVs. Also worth noting: they disproportionately lost older, obsolete tanks at Kursk, and built new, capable tanks. **The Germans lost a very manageable amount of equipment at Kursk—less than a month's worth of AFV production.**

If modern war means you cannot realistically destroy enough weapons in one battle to matter—if the largest battle of all time didn't really matter—what did?

Allied Air and Sea Operations Won the War

In O'Brien's methodology, we should look at what the Axis spent its productive effort making and consider what Allied actions slowed that productive effort. In both theaters, the answer is shocking. The Germans spent relatively little productive effort on tanks, focusing far more on aircraft, submarines, and vengeance weapons (i.e., proto-cruise missiles and rockets). The Japanese spent heavily on aircraft as well, but also a tremendous amount on freighters and oil tankers.

The Allies won the war by using air power to destroy the German and Japanese capacity both to *produce* military equipment and to *transport* it to the battlefield. By 1944-45, the Germans and Japanese could not use their economies to arm and supply their armies on the battlefield, leading to their inevitable defeat.

In the European war, American and British airpower: (a) directly destroyed a significant amount of productive capacity, (b) rendered remaining capacity far less efficient, (c) made it impossible for the Germans to defeat western ground forces, and (d) compelled the Germans to waste tremendous resources on air defense and exorbitant, ultimately ineffective vengeance weapons.

In the Pacific, the United States used carrier-based airpower, submarines, and bomber-deployed mines to isolate Japan from the resources of the empire it conquered in 1941-42. American bombers also directly destroyed factories and transportation systems, leading to similar levels of economic dysfunction as in Germany.

Amateurs Discuss Destruction; Professionals Discuss Non-Operational Losses

O'Brien is at his absolute best describing the subtle factors that whittled away Axis combat power. Air and sea power created a situation where the Axis war machine simply could not function anywhere near as efficiently as it needed to.

For example, after the Allied air bombings started, Germany built vast underground aircraft factories to protect production. But that move carried a host of negative side effects. To name a few:

- The direct cost of building new factories in inconvenient places was very manpower intensive.

- The old factories had been sited convenient to resource bases. The new factories were necessarily *not* near resource bases—they were in areas where one could dig out big new facilities.

- Railroads, by far the most efficient means of transportation, were set up to efficiently move goods to and from the old factories, not the new ones.

- Those factories had to be optimized for things like size and compactness, not efficiency and quality control. Aircraft frequently broke down on their way to the front lines. Once damaged, they could not be fixed on the front lines and were effectively useless.

These effects ultimately mean fewer airplanes produced as the war went on, and dramatic increases in non-operational losses. Citing the German field marshal in charge of aircraft production, O'Brien assessed that the Germans lost approximately half of their planned fighter production in this way. This comports with post-war American assessments, which assessed total German aircraft losses at the front as 15,327 in 1944, and non-operational losses at approximately 15,000. For comparison: total German aircraft losses at Kursk were approximately 159(!)

Data from HtWWW, recreated to improve image quality

The inefficiencies stemming from bombing ruined several would-be German technological panaceas. Germany developed the world's first operational jet fighter, the Me-262. Lack of fuel meant there was not enough training for its pilots, and maintenance shortfalls meant that about half of the 1,400 Me-262s produced by Germany were lost outside of combat. The Germans developed a dangerous, relatively modern submarine, the Type XXI. They intended to deploy dozens in a way that the Allies would have been hard pressed to fight, but production delays meant that only one ever actually went on a mission.

Allied Bombings Provoked Vastly Expensive Reactions

O'Brien thoroughly documents how expensive Germany's reaction to Allied bombings was. First, expenditures on anti-aircraft weaponry and fighter planes skyrocketed. The Germans practically denuded the Eastern Front of fighter planes to have more to throw at the bombers. By late 1944, a bare 15% of German aircraft were fighting on the Eastern Front. In the second half of 1943, significantly more concrete was devoted to the construction of protected aircraft factories in Germany than to the entire Eastern

Front. **The amount of concrete devoted just to protecting Hitler personally from air attack was almost a third of the entire total for fortifications on the Eastern Front**

Second, and perhaps even more importantly, the bombings caused Hitler to authorize the most expensive German program of the war, the V-2 rocket, with essentially no goal in mind other than the psychological importance of striking back at Allied cities. The V-2 program cost the Germans proportionally as much as the U.S. spent on the Manhattan Project. According to O'Brien, the design and construction of V-2 rockets cost as much as all German AFV construction between 1939 and 1945(!)

It may be surprising to learn that the V-2s were basically irrelevant to the war. Launched primarily against UK cities, the V-2s killed several thousand civilians. However, more German slave laborers died building the V-2s than British civilians died from their use. The stupidity and expense of building the V-2 probably saved tens of thousands of lives elsewhere, which is ultimately yet another benefit of the Allied bombing campaign.

O'Brien's production-focused approach yields some surprising insights about what the Germans should have done. The most cost-effective effort was certainly the use of submarines (U-Boats) to attack American shipments of military equipment across the Atlantic Ocean. For example, data suggest that the German navy destroyed at least twice as many American aircraft in the pre-production phase by destroying resource shipments as the German air force did in combat in 1942 and 1943.

Japan Was Far More Powerful Than We Usually Think

O'Brien goes to great lengths to illustrate that Japan was not just a small island power easily subsumed by American production. The Japanese economy, at its peak, produced about as much as the Soviet Union. Its industrial base was mostly untouched until mid-1944. In 1943, it produced as much steel as the Soviet Union. The Japanese navy's planes doubled between 1943 and 1944.

Famously, the Soviets focused on producing tanks. The Japanese focused on freighters and oil tankers. They had to—they had gone to war to obtain natural resources by conquest away from their home islands, and to use those resources, they had to ship them back to the home islands. The problem was that once the American navy had conclusively defeated the Japanese navy (certainly no later than mid-1943), nothing could stop American submarines and carrier-based aircraft from savaging Japanese shipping.

But just as the bombing of Germany weakened German production in several complementary ways, the American war on Japanese shipping caused cascading

logistical problems. For example, one very successful initiative was the aerial mining of Japanese ports. **The mining didn't start until March 1945, but it still sank more tonnage than U.S. submarines did in the entire war.** Beyond that, the mining forced Japanese ships to use smaller, less efficient ports with bad communications and dock facilities, reducing the value of the small amount making it through to port.

The Morality of Strategic Bombing

One small but noteworthy argument in HtWWW relates to the "area" bombing of German cities, the firebombing of Tokyo, and the atomic bombings of Hiroshima and Nagasaki. Usually, air power enthusiasts are apologists for the indifferent (or even intentional) bombing of Axis civilians. They portray the fire/atomic bombings as difficult, but necessary and effective. O'Brien calls that logic into question.

As we've seen, strategic bombings that targeted specific factories or mined harbors were extremely useful. O'Brien writes, however, that civilian-centric bombing had ambiguous effects. Obviously, killing workers hurts productivity. But killing their spouses or children or destroying their houses does not immediately lead to unsolvable resource dilemmas.

It is perhaps too obvious to bear mentioning, but to the extent the civilian-centric bombings were not as effective as the rest of the strategic bombing campaign, they were immoral. O'Brien does not shy away from this conclusion, and shows a commendable willingness to gore sacred cows. He writes that Arthur Harris, leader of the British bombing campaign, resisted attempts to shift bombing away from cities generally and toward fuel or transportation targets, even when the evidence was clear that bombing was more effective. He takes the unusual step of effectively calling Churchill a moral coward:

> From the autumn of 1944 onwards, it becomes difficult to justify any of the area attacks on German cities as important in winning the war. However, removing Harris, which might have allowed for such a change, was beyond the Churchill government's courage.

O'Brien is similarly critical of Curits LeMay, the American general who oversaw the firebombings. In his autobiography, LeMay justified the firebombings on the vague claim that they damaged Japanese morale. His evidence was a decline in Tokyo's population, but population tended to decline after bombing raids anyway because production was relocated after raids. O'Brien concludes:

> LeMay's view of warfare was definitely a step backwards – and possibly self-defeating. His notion of causing justified destruction with little evidence beyond the physical action of destruction added an unnecessary air of irrationality to the American campaign.

Another important consideration in the debate over using the atomic bomb that I had not seen before: the firebombings were *declining* in effectiveness over time for the obvious reason that the best targets were already gone and the remaining cities were taking better precautions. The argument that firebombings alone would drive Japan to surrender without need of the atomic bomb must account for this awkward fact.

Death by Oil Austerity

Oil was a particular problem for Japan. The Japanese had gone to war with the United States in no small part because the U.S. cut off oil exports to Japan. The Japanese attempted to replace U.S. oil with oil from southeast Asia. Again, this was far less efficient than the pre-war arrangements, and once the U.S. Navy shut down shipping, the Japanese had to make drastic cuts to conserve oil.

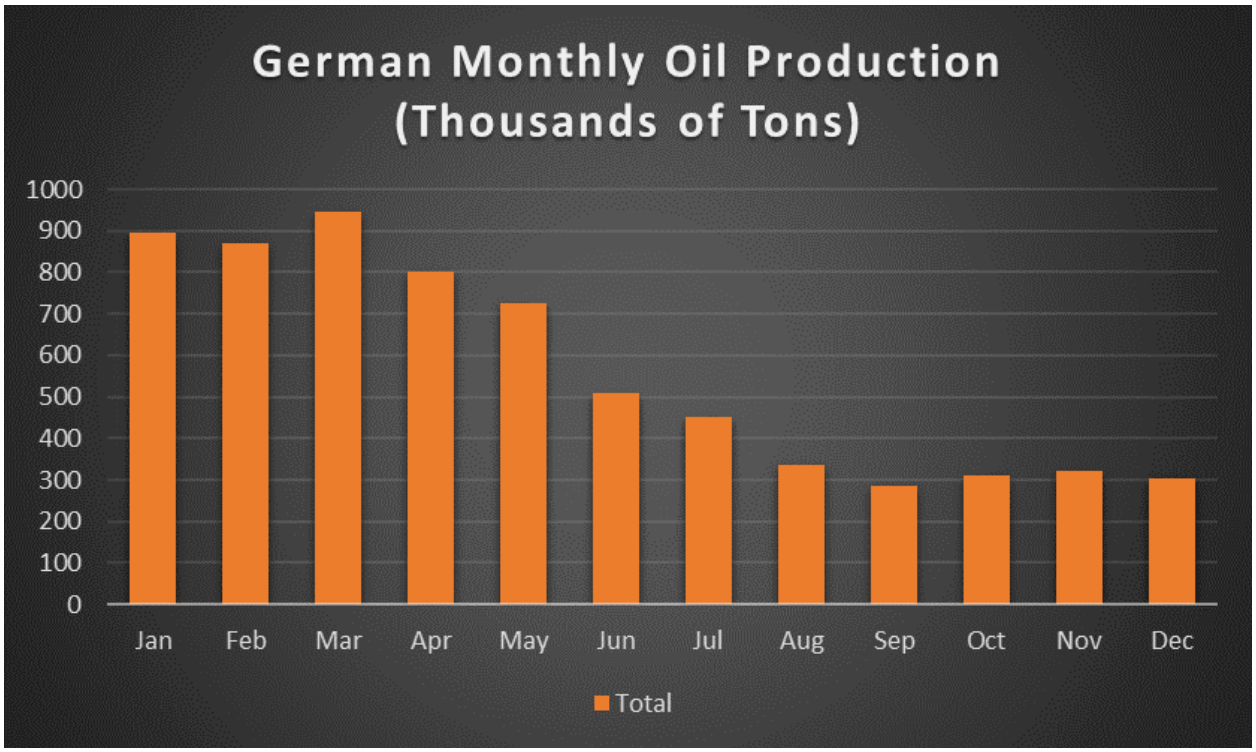
Perhaps the single worst way to conserve oil was in flight training. The Japanese air forces entered a death spiral. To replace veteran flyers lost at Midway or off Guadalcanal, the Japanese parsimoniously supplied oil for limited training flight hours. This famously led to their being massacred by better-trained American pilots in the Great Marianas Turkey Shoot.

Another point brilliantly made by O'Brien: reductions in fuel expenditures meant Japanese pilots did not have sufficient training in navigation. Early in the war, aircraft were delivered to forward operating bases by aircraft carriers, limiting the ability of pilots to get lost. Once the American Navy had driven Japanese carriers from the scene, Japanese pilots had to make several over water hops to fly from the home islands to forward bases. Shocking numbers were lost along the way—up to 50%. (*HALF)* (!!!!) (I CAN'T EMPHASIZE ENOUGH HOW CRAZY THIS IS).

In addition to reduced training, Japan found another terrible way to conserve fuel: do not test engines for very long on the ground before sending single-engine fighter planes off to distant island deployments. Maintenance factors were one reason that on just one leg of the trip from Japan to forward bases, 5% of aircraft that took off from one island never landed at the next.

By 1945, the Japanese economy was so desperate for fuel that the government set up more than 34,000 small stills in the home islands to distill the oil from pine needles into aviation fuel.

In the European theater, the Allies specifically targeted German coal-to-oil conversion plants and Romanian oil facilities, which became far less productive. Over the course of one year, 1944, the western Allies destroyed the German energy market, and with it the German economy writ large.



Data from HtWWW, recreated to improve image quality.

German oil shortages caused exactly the same training problem Japan had faced, with a slightly different but similarly disastrous outcome. Japanese training and production problems led to planes not arriving where they were supposed to in fighting condition (perhaps as few as 10% were actually combat capable when they arrived!) For Germany, training shortfalls meant annihilation for their air force as inexperienced pilots were forced to fight numerically and qualitatively superior American and British pilots. German monthly aircraft lost/damaged rates increased from 52.5% in January 1944 to 96.3% in June.

One particularly illuminating episode illustrates how these problems manifested for Germany. The German air force had a reserve of 800 aircraft to counter the D-Day landings. The pilots of that force were used to only flying under expert control systems

in Germany (countering bombing raids). When they went to France, they had trouble navigating and often landed on the wrong fields. Ultimately, they were poorly prepared to fight. The head of German fighter command was certain that the entire reserve did not destroy even two dozen Allied aircraft.

American/British Airpower Decided the Outcome of Land Battles

Beyond the strategic effects of bombing, tactical airpower (i.e., airplanes attacking land forces) gave an insurmountable advantage to the western Allies' land forces. After D-Day, the Germans had a very strong defensive position in the hedgerows of northwest France. Allied aircraft literally carpet bombed one of the strongest divisions in the German army out of existence, with 70% casualties *in one day*. That division would normally have approximately 200 AFVs. At the end of that one day of bombing, it had 14.

The Battle of the Bulge, the last offensive by the Germans to drive back the western Allies' advance, was almost pathetic in its hopelessness. We Americans tend to focus on the hard fighting at the outset of the battle, and the stout resistance of the 101st Airborne at Bastogne. Knowing that airpower would make their attack impossible, the Germans timed the battle for bad weather and prayed it lasted as long as possible. Prayer was really the only option. Once the skies inevitably cleared after a little over a week of bad weather, more than 2,000(!) Allied bombers destroyed the German offensive. With most logistical support wiped out, one famous German division had to abandon all its vehicles and walk back to Germany.

Criticism of HtWWW as a Book: Love the Data, (Mostly) Don't Care About the People

My single biggest criticism of HtWWW is O'Brien spends a lot of time (I would estimate 20% of the book) discussing the relative importance and influence of various people in the United States and United Kingdom. The section on Doug MacArthur is worth a longer digression, which I have included below. The problem is that focusing on personnel is almost completely irrelevant to the main argument of the book.

For example, it is modestly interesting that Franklin Roosevelt, consistent with advice from Harry Hopkins and Admiral Ernest King, focused America's productive effort on air and sea power. It is not at all central to the argument that air and sea power won the war. The fact that these particular people thought it was a good idea to build planes and ships matters less than the outcome that the U.S. did exactly that.

I am very much interested in World War II history, and on an interestingness scale of 1-10, I found this discussion to be at about a 4. The central argument of the book about German and Japanese production was a consistent 10.

Sidenote: MacArthur Was a Disastrous General

In the part of the book focused on personnel, the one discussion that hit around a 9 or 10 was of Douglas MacArthur and the invasion of the Philippines. MacArthur was the American general commanding the defense of the Philippines. The Japanese conquered the Philippines, and MacArthur slipped away to Australia, heroically vowing, "I shall return." He did in December 1944, and some of the worst fighting of the war took place, with massive casualties for the Americans, Japanese, and Filipino civilians. Fighting was still ongoing in the Philippines when the war ended in August 1945. The Americans took more than 220,000 casualties, the Japanese 430,000. Estimates vary on Filipino civilian deaths, but 750,000 is a credible middle of the road estimate.

O'Brien's contribution here was pointing out the strategic pointlessness of MacArthur's invasion. The big American strategy in the western Pacific was to penetrate the Japanese defensive line of islands to link up with China. The northern Marianas Islands also were within heavy bomber range of Japan, and so would allow for efficient, effective bombing. (Bombing Japan from bases in China were logistically impractical, with virtually all materials being flown in over the Himalayas—another fascinating logistics discussion in this book.)

The Americans had already conquered the Marianas Islands and had total air and sea dominance in the western Pacific. The forces the Japanese had in the Philippines could have been simply left to wither, as they had been on other islands bypassed by the island-hopping campaign.

So, why did the Philippines invasion happen? The inescapable conclusion is that MacArthur was too politically formidable to risk angering, and he personally wanted to invade the Philippines to make good on his promise to return. Not coincidentally, the Philippines also offered some prospect of an extended land campaign where MacArthur could improve his reputation after his disastrous original defense of the Philippines.

Also relevant, in O'Brien's words: "MacArthur [] dazzled Roosevelt with tales of easy victories and grateful Filipinos and American voters."

Criticisms of HtWWW's Central Argument

I think it is clear from the data that O'Brien's argument, that air and sea power played a more important role than land battles in deciding the war, is fundamentally right. Still, one can raise a few objections.

Individual naval battles *were* capable of destroying a significant percentage of overall production. O'Brien discusses the Battle of Midway, where the Japanese lost four aircraft carriers (37 percent of their navy's aircraft carriers at the time, 22 percent of all carriers they had during the war). This point doesn't really disprove O'Brien's core argument—it is basically a footnote saying that individual naval battles are more likely to matter than individual land battles.

Politics and psychology matter tremendously in war, sometimes more than productive effort. O'Brien tacitly acknowledges this in the V-2 weapons discussion when he notes that the Germans spent all this money and effort on a psychological salve to the trauma of Allied bombing. The Japanese *did* ultimately surrender after the atomic bombings. (Or, if you are more on the revisionist end of the spectrum, they surrendered after the Soviets declared war.) France surrendered after a few disastrous battles. The productive effort lens might be useful, but subject to important caveats.

Why Does the Conventional Narrative Focus on Battles?

A perfect companion book to HtWWW would examine *why* military historians and the broader public have focused inordinately on battles. Here are some plausible factors:

- **Battles are more dramatic.** Propaganda during the war focused on battles so that there would be more inherent drama. Working twelve hour shifts in a factory to win the great battle is probably psychologically easier than thinking your work is going to disappear into an inchoate slog.

- **The battle-focused narrative empowers the blue-collar men who did the hard fighting**. This is politically convenient. Those blue-collar men vote and do not want to be told that what they did was relatively less important. It is also commercially advisable to play up the everyman. People want to watch movies and buy books showing people like them (or their fathers or grandfathers) making an individual difference in the war. They don't want to watch a movie showing how important it was that the bomber offensive led to Germany decentralizing German manufacturing, thereby increasing the attrition rate of German fighters

on their way to the front.

- **People want to believe that individual effort matters**. They want to believe that the endless suffering means something, that their loved ones' deaths meant the world could be free. This is particularly true in the heartbreaking Soviet context where, for example, 80 percent of males born in 1923 did not survive the war.

Broadly Applicable Lessons from HtWWW

One can obviously draw specifically military lessons from HtWWW. O'Brien concludes his book by noting that Allied air and sea power fundamentally took away the ability of the Germans and Japanese to move resources or even their own armed forces. Even horrifically destructive battles cannot do this on their own. O'Brien notes that the U.S. won many battles in Afghanistan, but because the Taliban could still move forces and resources, they still won.

Another obvious lesson: target productivity, not forces. Destroying a tank on the battlefield is the least efficient way of defeating an enemy than sapping away his ability to replace losses. Target as many different parts of the supply chain as possible. There truly was no single shortage that doomed the Axis. Oil is arguably the closest tangible resource. The sense one gets from HtWWW is that the Allies' "solution" of air and sea power was robust; there truly was no single thing that could have changed the outcome of the war. Conversely, a war based on battlefield destruction alone quickly turns into a bloody quagmire, like World War I.

Abstracting away from just military operations, the complexity of the modern world means that success or failure rarely hinges on a single factor. It is not *impossible* for a single technology or genius leader to accomplish great things, but it is far likelier that success is built on interlocking efforts aimed at the same general goal. As I read HtWWW, I thought about Amazon, Google, and Apple. None of those companies are built on a single "killer app". They are built on doing a lot of little things well.

Finally, we should be wary of romanticized narratives and simplistic conclusions about why something happened. Finding the true story takes a nuanced, un-biased interpretation of both data and first-hand accounts. HtWWW is a fantastic example of that.

Bonus: Great Statistics/Logistics Stories I Couldn't Work in Anywhere Else

HtWWW spoils the reader with an endless parade of fascinating statistics. As I said in the opening, when I first read the book, I excitedly texted friends these numbers every few minutes as I was reading. These stories didn't fit in my review, but I could not in good conscience omit them. Below are just a few.

- Germany, Japan, the United Kingdom (including the British Empire), and the United States all devoted between 65 and 80 percent of their economic output to the making and arming of aircraft, naval vessels, and anti-aircraft equipment.

- During the three most intense months of the Battle of Britain, the German air force landed only 17 bombs that caused "severe" damage to aircraft and aircraft engine production, electricity services, gas supplies, water industry, oil infrastructure, and food service industries *combined*. This underscores just how ineffective Germany's campaign was and how little chance there was a of an actual British defeat.

- According to Albert Speer, the German minister for armaments during the war, the Germans had 2.33 million workers building aircraft, which was not only more than all the works employed building all weapons and ammunition for the army, it was equal to or more than the number of American workers building aircraft. Germany built about 65,000 planes in 1943-44. The United States built 182,000.

- On December 27, 1941, when the climactic battle outside Moscow was taking place, the Germans had deployed almost a hundred more aircraft to the fight the Royal Air Force than they had on the Eastern Front.

- Railway activity in Germany and occupied territories declined by almost 40% between August and December 1944.

- The Japanese navy lost 50% more pilots at the Battle of Santa Cruz (off Guadalcanal) than at Midway—and that was only one of six major naval battles in the Solomon Islands.

H.P. Lovecraft: Against the World, Against Life, by Michel Houellebecq

Original title: H.P. Lovecraft: contre le monde, contre la vie

Michel Houellebecq translated by Dorna Khazeni with an introduction by Stephen King, Orion Books, 245 pp, £8.99

literature/ literary studies

“Those who love life do not read. Nor do they go to the movies, actually. No matter what might be said, access to the artistic universe is more or less entirely the preserve of those who are a little fed up with the world.” - Michel Houellebecq, H.P. Lovecraft: Against the World, Against Life

“I am only about half alive.” - H.P. Lovecraft in a letter to Alfred Galpin, May 1918

In an inversion of the typical reasons one might read a biography, the French author Michel Houellebecq’s admiring but devastating account of the early 20th century horror sci-fi writer H.P. Lovecraft’s life, titled *H.P. Lovecraft: Against the World, Against Life,* is best read as a Houellebecq novel—his very first. The likeness in trajectory between Lovecraft as described by Houellebecq, and the prototypical Houellebecqian man is so striking as to leave one wondering whether it is the latter’s percept that transmuted the raw facts of Lovecraft’s life, or if it was his reading of Lovecraft at a formative age that saw the emergence of his infamous critique of the liberalization of values. In any case, the cover art for the 2008 print edition published by Orion is somewhat misleading as to the book’s contents: the fantastical illustration of monsters in brown and gold suggest the escapist delights of fantasy, horror, and YA fiction. While Lovecraft is often discovered by readers in their youth, Houellebecq’s analysis is better suited to those who have lived long enough to accumulate the compacted disappointments and resentments that render this biography so devastating to behold.

The four-part essay (originally published in French in 1991, then translated into English and introduced by an anodyne Stephen King in 2005), follows the same trajectory as realist fiction like *Madame Bovary*, insofar as the book begins in Lovecraft’s childhood and proceeds more or less linearly toward the protagonist’s untimely death. More

precisely, it starts with a picture of a lethargic, moody, socially obscure young man living indefinitely in his mother's house; that is to say—anticlimactically. Having already lost his religious faith in an otherwise idyllic childhood, Lovecraft adhered to a bitter philosophy of a vast cosmos indifferent to humans and their efforts. He wrote a single story, *The Alchemist*, before plunging at age eighteen into a five year period of utter inactivity, as if intuiting the real implication of those "shades of the prison-house" described by Wordsworth; "Adulthood is hell", he wrote in a 1918 letter.

Some signs of life eventually emerged from Lovecraft in the form of written correspondence, which would prove the only reliable form of social activity throughout his life. Around the same time, he wrote a scathing critique of the "insipid love stories" of writer Fred Jackson in a series of letters to the pulp weekly, *The Argosy.* This resulted in his being invited to join the United Amateur Press Association, a part of the independent journalism movement that was growing in popularity across the US at the time (and which sounds rather a lot like today's network of Substack and Twitter (excuse me, "X") writers). It was through this network that his contact with the outside world began: Lovecraft met friends, collaborators, as well as the only woman he was to ever "know"—the divorced, Jewish, independent writer and single mother seven years his senior, Sonia Haft Green; an unlikely match for the conservative and anti-semitic Lovecraft. The couple would go on to marry and enjoy at least one year of joyous, optimistic matrimony before "the inevitable" would occur.

Following a long-distance courtship initiated by Sonia, Lovecraft would leave his mother's home in Providence, Rhode Island, to join his wife in New York City. There, Sonia supported him financially as he tried in vain to secure an income in an economy that was "at the time not even in crisis"—leading Houellebecq to conclude that "in the American economy of his era, there was absolutely no conceivable place for an individual like Lovecraft." He was flummoxed by his inability to achieve any employment whatsoever given his estimation of his intelligence and capacities. Inflexible and antiquated, Lovecraft fared like some Yankee Ashley Wilkes, experiencing the new world as cruel and terrifying.

While one can never know the true nature of another's relationship, it appears that the tension generated by Lovecraft's utter failure to make an income metastasized into an insurmountable conflict once Sonia lost her job as a saleswoman in a clothing store. Meanwhile, Lovecraft's "WASP's well-bred racism" metastasized too, as he watched immigrants find employment where he did not. Sonia would move to another state to pursue a job while continuing to support him financially as he moved to a smaller, cheaper dwelling in Red Hook. Despite the increased proximity to mixed company, Lovecraft preferred it to the indignity of living with Sonia in some obscure flyover state.

Eventually, he would return to Providence and migrate his dependency from his wife to his aunt, and Sonia would request a divorce. The disappointments on all sides were immense, and the dashed futures alluded to with only a series of strategic ellipses by Houellebecq.

Such a trajectory is familiar territory for anyone who has engaged with Houellebecq's oeuvre. Indeed, Lovecraft could have been a third protagonist, Michel and Bruno's other half-brother, in *The Elementary Particles* (aka *Atomised)*, the 1998 novel that launched Houellebecq to literary stardom and which ends in romantic failure, illness and suicide. In a 2010 interview with *the Paris Review,* Houellebecq stated that the question of whether love still exists plays the same role for him that the question of God played for Dostoevsky. As far as his account of Lovecraft's life is concerned, the answer to that question is a resounding "no".

Having experienced the material world's utter indifference to his refined manners and erudite mind—to anything extraneous to the profit motive, Lovecraft retreated further into a world of his own making, where the love and hate that animated his time in New York would fuel his literary alternative to living life. Far from trivializing or dismissing Lovecraft's virulent racism as an embarrassing quirk as his other biographers do, Hoeullebecq attributes to it the "hideous corporeal vigor" of Lovecraft's later, greater works, his "great texts", including *The Call of Cthulhu* and *The Whisperer in Darkness*, published alongside this biography. Lovecraft's victims meanwhile, those educated, sexless, *sensitive young men* like the author himself, were rendered impotent before such material terror. The discomforting phenomenon emerges that a passion as repulsive as racial hatred is nevertheless a passion, and thus can be conducive to the creation of "authentic" work, even great work.

While Lovecraft's "great texts" were celebrated by a small circle of peers and collaborators in his lifetime, and inspired cult-like devotion to the writer after his death, they never earned him a real dollar while alive. Writing—even great writing, without love, sex and adequate remuneration does not a life make, and he died relatively young, at age 46, of intestinal cancer. In light of the rigorous materialism of Lovecraft's conception of life, it is safe to assume that he experienced his death to be meaningless. The brutality of that impression pales before Houellebecq's own assessment of Lovecraft's life, which is that Lovecraft hadn't lived *at all*, save for his two year marriage to Sonia, and so necessitated his creating "a permanent recourse to life" in writing.

The implications for that growing cohort of anonymous men online today with whom both writers enjoy god-like status, is what makes reading *Against Life* twenty-odd years after its publication a disconcertingly enlightening experience. The book holds possibly

more relevance today than when it was first published for the insight it provides into the psyches of the Lovecraftian NEET (young persons not in education, employment or training) who produces masses of user-generated online content today; despair may be transcended through creation where it cannot be through love. For those not blessed with the NEET's good fortune (having one endlessly patient female relation or another to host them), they can look to the likes of J.K. Huysmans, the French civil servant (whose own dismal biography features in Houellebecq's infamous 2015 novel, *Submission*) who produced his oeuvre in the perimeter hours of the 9 to 5 work day.

One can draw from Houellebcq's interpretation of Lovecraft's life that today, when the economy *is* in crisis, we are seeing Lovecraft's story play out a thousand times over as young men and women vie for the same bureaucratic make-work in brutal competition antithetical to romance. These things so woefully beyond reach in any sustained form for a man like Lovecraft in his age are possibly even more so in our own. Likewise, amidst material scarcity, racial scapegoating and conflict intensifies. Most will not produce great works of art (if they produce anything at all, most simply consume), and yet some, like Lovecraft, will—and in so doing maybe find success after death, but in accordance with the conclusions drawn from Hoeullebecq's now sizeable corpus, only love constitutes a *life.* Houellebecq, so ritually regarded as a pessimist, misanthrope or nihilist, is actually our foremost romantic, and this is nowhere more evident than in his devastating analysis of the life of Howard Phillips Lovecraft.

Impossible Histories: The Soviet Republic of Alaska, the United States of Hudsonia, President Charlemagne, and Other Pivotal Moments of History That Never Happened by Hal Johnson

Impossible Histories: The Soviet Republic of Alaska, the United States of Hudsonia, President Charlemagne, and Other Pivotal Moments of History That Never Happened by Hal Johnson is a book of alternate history scenarios that tries to stand out among all the other books of alternate history scenarios by being both crazier and less crazy than the others.

When I say it's less crazy, I mean that Johnson stops to give arguments why he posits the things he says would happen would happen. No good alternate history makes only arbitrary statements, but Johnson really tries to persuade you. I guess I don't know if Japan really would have been worse off with no atom bombs dropped, or if Rome really would have not fallen if they had stopped taking hot baths, but Johnson marshals a bunch of evidence that any doubting Thomas would have to argue against.

And it's crazier, too, because sometimes it doesn't just stop at the persuasive part, but then veers off down a highway to loonyville. Don't get me wrong, this is a fun highway. The Roman Emperor Julian replacing Christianity with something different is plausible, but after that somehow the Turks are conquering Europe, and the New World is filled with pagan Europeans reinventing feudalism, while Ignatius of Loyola starts a secret guild of holy astronomers.

Everything is laid out in the table of contents as linear arguments so you can watch the history go off the rails. The chapter "What if the British navy kept their fruit fresh?", for example, runs:

Scurvy is cured for real -> Polar exploration is easier -> Amphibian fossils found earlier -> YOUR FAVORITE DINO IS A SALAMANDER!

I see where you started out, there!

I think the book contains a coded admission that sometimes it's just going off on a flight of fancy. There are constant references to weird books from the occult section of the bookstore, such as David Hatcher Childress' von Daniken-lite *Technology of the Gods* or Manly P. Hall's *The Secret Teachings of All Ages*. Mixed in with the actual evidence Johnson marshals, which comes from history books, are bald assertions taken from

poetry, the Bible, or comic books. I think he's messing with us to make the scenarios more fun!

But also I think the book is crazy because it begins with a statement that alternate histories are literally impossible, and that Napoleon is no more likely to have invaded England in 1803 than Emily Dickinson was, even though Napoleon was ruler of a hostile power and Emily Dickinson wasn't even born yet.

In this review I'll look at a couple of the scenarios that Johnson proposes, point out how likely (or crazy) I think they are, and close by examining the frame, represented by a philosophical prelude and a philosophical postlude.

I should probably say from the start that I really enjoyed this book. Even where I disagreed with it, it always gave me something new to think about. When I thought I knew a lot about a topic, and expected the same few facts to be cited, Johnson found strange new sources to cite. He seems to have read everything, and is never ashamed to parade this fact. For example, to show how people romanticized war during the long century of peace before World War I, Johnson uses an obscure memoir by a big-game hunter, an obscure children's book titled *Uncle Sam's Boys in the Ranks* and an obscure story by Mary Shelley. To emphasize how hated Hirohito was in America during World War II, Johnson quotes a Woody Guthrie song, a comic book, a Burma Shave sign, *Colliers Magazine*, and (here comes the crazy part) *Emperor Hirohito of Japan: Satan's Man of Mystery Unveiled in the Light of Prophecy*.

Johnson mentions that he judges historians more on their prose style than their accuracy, and that comes as no surprise. For better or worse, he certainly leans on older writers: Gibbon, Hobbes and Hume, Washington Irving and Lord Macaulay. Johnson certainly tries to mimic them, and his prose is what they used to call pellucid. He's never jokey but he's often wry.

Perhaps I should say he's never jokey except when he's quoting actual joke books, which I think he does four or five times.

The scenarios

The book contains twenty scenarios, raging across the globe (including Antarctica) and going back as far as 432 BCE. None of them are the old standby "What if X and not Y had won the battle of…Gettysburg or Yorktown or w/e", but several are the other old standby, "What if X died, or alternately did not die." Some involve great events, like empires changing hands and such, and others are what you might call soft subjects, like a world without Romantic poetry or without Freud or without Harriet Beecher Stowe writing a book about Aaron Burr.

Each scenario is divided into two parts. In the first part, Johnson gives a mostly neutral, factual account of history as we know it. The second part is the what if.

The first scenario I wanted to look at is "What if Richard the Lionheart died at Jaffa?" That is to say, during the Third Crusade. Richard the Lionheart did not, in fact, die on Crusade. Instead, he sailed home to England after reconquering a lot of Crusader territory, although not Jerusalem. On his way home, a shipwreck landed him in the hands of his old enemy, the Duke of Austria. England paid what Johnson calls "a literal king's ransom" to get Richard back. The Duke used the money to build the walls of Vienna.

If Richard had died, he never would have been shipwrecked, the Duke never would have gotten a ransom and Vienna never would have gotten those walls.

The walls of Vienna are important, because twice the Ottoman Empire found itself checked against them, once in 1529 (the book gets the date wrong) and once in 1683. Without walls, the Ottomans would have just run over Vienna, and into Austria and all of Central Europe.

There are two things to notice here. One is that Austria had three centuries to build its own damn walls. Johnson counters that in fact, Austria had three centuries to modernize its wall and didn't. Everyone else was updating their walls to deal with new technology like canon balls, but Austria didn't bother until after the Ottomans attacked. This is clearly a guess. What if Richard died? We can all agree that Vienna wouldn't get walls in 1190-something. We may not all agree it would still be naked in 1529.

The other is that the scenario doesn't end with the fall of Vienna. Soon the Ottomans are marching across Europe, destroying the Holy Roman Empire and reducing Central Europe to a perpetual battleground. When World War I starts it starts here in the ruins of the Empire. It's pretty much the end of Europe. That's a lot of history Vienna is guarding alone!

Johnson tries to justify this as well. The Ottomans and France were perpetual allies, and they both hated the Holy Roman Empire (and Austria). These German states would be fighting a two-front war! Also, the tiny states of the Holy Roman Empire were frequently fighting against themselves, and the Empire going through civil wars recently, between Catholic and Protestant factions. The Ottomans were past masters of playing one side against another. Protestants and Ottomans had frequently been allies. Catholics might look to France and an ally. France and the Ottomans were the firmest of allies already. It's like a web of violence! The Holy Roman Empire was just looking to get torn apart, and maybe this is when it will happen.

Maybe! But this is the book's method, to start out with something unassailable, build through something a little hard to prove, and then end up in a fantasy land. Some fantasy lands are more fantastic than others, but as long as all the fantasy is relegated to the what if part of the chapter, I guess it's all in good fun.

One of the more audacious scenarios Johnson proposes involves Vikings in Vinland, namely what if the Vikings have stayed? This seems a minor point, and Johnson even calls the settlement of Vinland merely a footnote to a footnote to history. Only a pulp writer could imagine a colony of Vikings lasting through the ages on a Canadian island surrounded by native tribes.

But Johnson says they don't have to. All they have to do is last long enough to give the natives horses, iron and germs.

Horses, iron and germs were the weapons the New World used to subjugate the old. The Vikings had all three. If Vikings brought smallpox to North America, the deadliest epidemic in history would have happened centuries earlier.

Here's where we start to enter fantasy land (although the fantasy will continue). Because did the Vikings in Vinland even have smallpox? Probably not, although they could have brought it eventually. Would the natives of North America develop a resistance to smallpox after the first deadly wave hits? Johnson naively assumes yes, although it is my understanding that indigenous genetics would not permit such a quick assimilation to the disease. Johnson can only shrug and say, well, it can't hurt. I guess that's true.

Then comes the part no one can prove or disprove or even really argue with. Johnson does his best to explain why he assumes various native peoples up and down the Atlantic coast would or would not start riding horses. Finally he lights upon an Algonquian hegemony, teasing a potential Algonquia from sea to shining sea.

Whether any of that is true, it gives us something to think about. The age of imperial conquest would have been very different if Miles Standish had met mounted, armored knights!

Not every scenario has changes this vast. More than one ends in nuclear holocaust. There's not room in this review to cover all twenty of them, so If you want to find out how a French map causes the War on Drugs in America, you'll just have to read the book.

I already alluded to the philosophical prelude. This just asserts a very strict determinism on the authority of a couple of nineteenth-century philosophers and Mark Twain. The book conforms to the custom of positing small changes that sound plausible, such as Richard the Lionheart dying in a battle he was actually in (and his horse was killed in). If

his horse had gotten killed, surely he could have. But Johnson argues that he could not have, and that making Richard die in Jaffa is no less ridiculous than making him die on Mars. Only convention prevents an alternate history "what if Richard the Lionheart died on Mars."

This could be kind of grumpy and make you wonder why you should read the book! But it's laid out in a funny way, with quotes from a book on ninja and a charming profiles of the philosopher Arthur Schopenhauer. I think it's a clue, like the occult books, to remind you that all of this is fiction. Once you enter fantasy land you can't take any of it seriously.

The book ends with a philosophical postlude. It starts out cautioning any would-be time-travelers who want to change history that any small change will have big ripple effects, or the one big ripple effect. In any given sex act, which sperm wins the race is something that is easy to change with almost no effort. The next generation will be born of all different people!

Johnson lacks the courage of his convictions, though, and Copernicus and Marat appear in histories centuries after their great-great-great-great-grandparents' sperm should have been modified beyond all recognition.

The most interesting part of the whole book, though, comes at the very end. Still advice for time-travelers. This time he points out that time travel looks like it hasn't been discovered in the future, because no one from the future has come back. That means one of two things has to be true. Either traveling back in time is impossible, or humanity becomes extinct before anyone figures it out. If the first is true, trying to time travel is a waste of time. If the second is true, than even making progress towards time travel makes extinction come closer! Don't do it!

That kind of thought experiment I find hilarious and fascinating. The book is, honestly, full of little bits like that, things that make you think in ways you haven't before. There are plenty of facts about history I never knew about that I learned here, such as a war between medieval Ethiopia and Jewish state in Yemen, or the fact that the day Lincoln was assassinated, his secretary of state Seward was stabbed in the face.

If Seward had died that day, he never would have bought Alaska from Russia. If you want to imagine the Cold War with Russian missiles right in North America…well Johnson did that for you in one of his scenarios!

Making me think is the highest praise I can give a book, so I recommend this one.

In Search of Lost Time by Marcel Proust

You know Marcel Proust's *In Search of Lost Time* is a great book because however hard however many smart people try, no one can explain why.

Most people's knowledge of 'Proust' (the book, not the man, for the novel is more commonly referred to by its author's surname than its title, as in 'I'm reading Proust') extends to one of three things.

There's something about a boy eating a madeleine, and how entire worlds of memory can be evoked from a passing encounter with a sound, a smell, or, in this case, a taste of a cute little sponge cake dipped in some tea.

There's some vague knowledge of it being a tale about some sort of boy who becomes some sort of man growing up in high-society France at the turn of the 20th Century.

And, of course, there's the traditional conversational bait of the needy erudite: someone telling you – almost certainly unsolicited – that they're reading it, often by subtly-not-subtly plonking one of its volumes (usually the first) down somewhere everyone can see it, and then acting surprised when somebody does.

Assuming that you have no desire to read a million-word-plus metaphor about a small cake, nor feel much resonance with a long-dead, and even-longer decaying, society, nor want to associate with or be *that guy*, this is as far as most meetings with Proust go.

This is a shame.

Despite it being one of the things it's most commonly known for, *In Search of Lost Time* isn't a book you tell people about. It's a book that tells you about yourself. Reading *In Search of Lost Time* isn't a badge, something to 'get', to 'own', to show-off to others where you're at. It's a barometer… the extent to which you 'get' it shows you where you're going… or how far you've gone awry. There's a line about just this in the book itself: 'Each reader, when he is reading, is uniquely reading himself.' In Proust, there's a line for just about everything it's worth writing a line about.

But the point of Proust isn't to point at its parts, to analyse its punctuational adventures, or to try to pull apart its plot by poking your fingers into its sometimes hilariously large holes. And it's certainly not to extract quotations, to reduce a novel that feels like it lives and breathes beyond its pages and beyond the lifespan of its author, to a necropolis of Insta-optimised 'lessons', 'nuggets' or god-damn 'takeaways'.

Proust takes your craving to break down, analyse, and optimise, and it chucks it back in your stupid short-sighted face. These cravings were of course present in Proust's time, as they've been present in every other time. But they've never been as voracious as they are in ours.

Contrary to the all-too-easily jumped-to conclusion that a 100-year-old French novel is out of place and out of time in the modern West, Proust is even more a writer for our time and place than he was for his. And because no one would publish Proust today, it's not only the best thing we've got, it's the best we're likely to have for a long old while. If you poured a Proustian manuscript into Grammarly, it'd probably confidently exclaim you should give up writing altogether, or recommend a writing course for the defence against the dark art of adverbs.

When the cultural waters in which you've spent your 'life' nonchalantly swimming (or perhaps drifting) have eroded your beautiful, bonkers, edges and carried you along conveyor-belt-like to a place – to *a way of being* – unbefitting of a whole-brained human, Proust comes along, like a 1.25-million word incantation that breaks the spell and calls you back to the shore.

Allow yourself to get lost in the unreal world of Proust's novel and maybe, just maybe, you'll emerge the other side feeling like you've experienced something more real than what you heretofore took to be reality.

*

Most reviews of Proust focus on its length. Or that it's 'unfinished'. Or that a few characters can die and yet be resurrected later on. Or the sentences that meander from one digression to the next, some taking 'detours' that are themselves the lengths of small books.

As if any of that mattered.

It matters very much to a certain type of mind, of course. And that's the point. It's that mattering, that mind, where the error lies, not with Proust.

The fact it's not finished, that had he not died, Proust would no doubt have kept on reading and experiencing stuff that he felt compelled to incorporate into it in some way, is not evidence that the book is some sort of tragic failure. If it's evidence of anything, it's evidence of just how alive it is, and remains. It's a vivacity you can feel when you read it. Like it's not just a mirror to life, but in some way it *is* life. At least the sort of life that humans live… an artistic, creative dance, rather than a race for rats.

The length of any package of words is irrelevant. Terrible books tend to be long. But so, too, do great ones. Whether it's Tweets or tomes, it's all just time spent reading. Whether it's six months spent madly reading Proust or six months spent reading a mad menagerie of 280-character coughs, the time doesn't change… but how each changes you couldn't be more different. Starting with changing how you see the relevance of quantity of words to quality of worth.

You can't box the interdependent, interconnected, web of the realised relevance of your reality into the linear limits of a digression-less representation of it. If you focus on the futility of doing so, and conclude that *attempting to do so* was the problem… that you'd have been better off sticking to a topic you could weigh, and measure, and colour with a little anecdote, and evidence with an RCT… then you're missing the point. 'If I shortened my sentences,' wrote Proust, 'it would make little pieces of sentences, not sentences.'

In Search of Lost Time is long, because it has to be. Because it's trying to take you through a therapeutic process, via paper, remotely, and without the aid of a trained professional and/or powerful entheogens.

It's a journey fiction – *this type of beautiful, barmy, fiction* – is peculiarly well suited to guide you along. Before you can do anything about your untethered ideas-above-its-station craving for compartmentalising and decontextualising everything in misguided attempts to 'optimise' the whole, you need to *see* it. Which means you need to chisel away all the crap that's caked over your vision… which is kind of tough to do directly, given you cannot see the crap, and probably don't believe it even exists.

Don't pay attention to the length, but the fact that you find the length worth paying attention to. Why would you care? Is it because making every book 250-300 pages really makes them better, or is it because your attention, and everyone else's, has been so unhelpfully tilted towards counting stuff that you've really started to believe that the page count counts?

There are, in truth, not all that many abnormally long sentences in Proust, relatively speaking. The fact that those that are there catch us, possibly even confuse us, is telling. Forget what that says about the *book*. What does that say about *us*?

What if, too, the detours weren't detours? What if, when you find yourself screaming 'get back to the narrative, you crazy bastard, no one can be expected to hold all this in one's head at one time, haven't you heard of The Minto Method? How am I supposed to speed towards my goals this way?'... you're maybe missing something more important than how easy it is to skim in a straight line along the surface of the story?

Everything is either cultivating a relationship, or a distraction from doing so. To accuse Proust of getting distracted from the narrative is to miss the point that the 'distractions' are the relationships, and desperately clinging to the narrow certainty of the narrative is the distraction.

'The past,' Proust impels us to understand, 'constantly enters the present, and is changed by it'. Let that, and not the narrative arc, sink under your skin. Memory isn't about the past, and dreams aren't about the future. When you click into Proustian time, and look *at* the lenses you are usually too busy faffing about to do anything but look *through*, everything is present.

*

The original French title, *À la recherche du temps perdu*, is often translated not as ‘In Search of Lost Time’, but as ‘Remembrance of Things Past’. Proust hated this translation. And with damn-good reason. It’s a translation that expresses the exact distorted disposition towards the world he was writing to try to change.

‘Perdu’ carries with it an important connotation of ‘waste’. Wasting time is the ultimate modern disease… *especially* when we think we’re ‘optimising’ it by narrowly focusing our attention on *things*, and treating ‘time’ as a series of slices, rather than a flow.

And ‘recherche’ suggests more than mere remembrance, even if you’re ‘remembering’ in terribly reflective fashion as you fill in today’s boxes in your gratitude journal. It’s something more… Socratic. The emphasis is not on reflection, but examination. It’s remembrance as a prompt to live in a more examined way. One shouldn’t read Plato in some crass ‘Here are 7 lessons I learnt from Socrates’ way. One shouldn’t even strive to *be* Socrates. One should intend to live more Socratically, and attend to doing so. Proust calls us to the same beautiful challenge.

Like Socrates, Proust doesn’t set out to answer (or prompt you to answer) a staccato series of questions. He sets you out on a quest. As the general editor of the Penguin Classics translation tells us, ‘No sentence-type is more typically Proustian than the spiralling structure which contains half a dozen possible answers to a simple question.’

If you’ve just read ‘quest’ and thought: ‘Aha, like a hero’s journey… I wonder what his call to action is?’ then you’ve missed another point. Any time spent trying to extract a Proustian ‘elixir’ to *use* to help optimise your business or morning-routine protocols is as wasted as the embarrassing amount of the world’s time already spent trying to work out who the narrator of the book *really* is… how old they are, how autobiographical it is, and so on. Ugh, stop it.

*

Astute readers will by this point likely have noted the compartmentalisation, the extraction of takeaways, the time-slicing, etc. etc. and shouted ‘McGilchrist!’ on at least half a dozen occasions. And not (one hopes!) because *The Matter with Things* is almost as long.

In Search of Lost Time isn’t a ‘model’ novel. It’s a grand right-hemisphere *presencing* of the relational web of reality, not a left-hemisphere *re-presentation* of the things related… the *relata*: the people as things, the ideas as things, and so on. The topics it touches on – love, betrayal, manners, memory, snobbery, and just about anything else that appears, grows, and parties its way around the ocean of relationships – are not there to be defined, but explored.

It’s a novel that can, if you’re remotely receptive to it, and set out on your multi-month swim through it with the right intention and attention, bring you that little bit more in touch with reality too.

Not everybody can, of course. In rejecting Proust's manuscript, one half-brained publisher wrote: 'My dear friend, perhaps I am dense, but I just don't understand why a man should take thirty pages to describe how he turns over in his bed before he goes to sleep. It made my head swim.' I wonder if he also wonders why anyone would take longer than strictly necessary to eat, rest, or have sex. If this is likely to be you too, if you're likely to be unavoidably looking for things Proust is 'right' or 'wrong' about, or things that can be tested with trials, and instant feedback loops, then pop off for now, sort your living out, and come back and try again. Proust will be waiting.

*

To read Proust in order to acquire a *robotic* knowledge, to 'learn' 'things' you can 'use' would be a mistake. You *can*, of course. Plenty do, and not *entirely* pointlessly. But to do so is to sacrifice a rare opportunity to cultivate a deeper, more magical sort of knowledge. A participatory, wiser, more *beautiful* knowledge. It's the same sad sacrifice people make when they go to university to 'learn' or even to 'learn how to learn', rather than to bum around among some bars and some books for three years and somehow get magically spat out the other end as a better human being.

In Search of Lost Time is a work of the imagination, and the imaginal. It's one of the most beautiful works of literature in any language – French, English, and, indeed, whatever you call a language beyond language. As Proust wrote: 'Beautiful books are written in a kind of foreign language'. That is how they can inhabit you, and you them, in a way that dissolves and transcends linguistic boundaries.

Proust is a great book because it is a greatly *human* book. The sort that embeds you more deeply in your world, by getting you fabulously lost in another… that enriches your relationship with reality not *despite* being fiction, but *because of* being fiction. There is, of course, a long line (or two) about that too:

> After this central belief, which moved incessantly during my reading from inside to outside, toward the discovery of the truth, came the emotions aroused in me by the action in which I was taking part, for those afternoons contained more dramatic events than does, often, an entire lifetime. These were the events taking place in the book I was reading; it is true that the people affected by them were not "real", as Francoise said. But all the feelings we are made to experience by the joy or the misfortune of a real person are produced in us only through the intermediary of an image of that joy or that misfortune; the ingeniousness of the first novelist consisted in understanding that in the apparatus of our emotions, the image being the only essential element, the simplification that would consist in purely and simply abolishing real people would be a decisive improvement. A real human being, however profoundly we sympathise with him, is in large part perceived by our senses, that is to say, remains opaque to us, presents a dead weight which our sensibility cannot lift. If a calamity should strike him, it is only in a small part of the total notion we have of him that we will be able to be moved by this;

> even more, it is only in a part of the total notion he has of himself that he will be able to be moved himself. The novelist's happy discovery was to have the idea of replacing these parts, impenetrable to the soul, by an equal quantity of immaterial parts, that is to say, parts which our souls can assimilate. What does it matter thenceforth if the actions, and the emotions, of this new order of creatures seems to us true, since we have made them ours, since it is within us that they occur, that they hold within their control, as we feverishly turn the pages of the book, the rapidity of our breathing and the intensity of our gaze. And once the novelist has put us in that state, in which, as in all purely internal states, every emotion is multiplied tenfold, in which his book will disturb us as might a dream but a dream more lucid than those we have while sleeping and whose memory will last longer, then see how he provokes in us within one hour all possible happiness and all possible unhappiness just a few of which we would spend years of our lives coming to know and the most intense of which would never be revealed to us because the slowness with which they occur prevents us from perceiving them (thus our heart changes, in life, and it is the worst pain; but we know it only through reading, through our imagination: in reality it changes, as certain natural phenomena occur, slowly enough so that, if we were able to observe successively each of its different states, in return we are spared the actual sensation of change).

Read it. You'll maybe emerge a better person, and you won't know how, or why. Then read it again, and you'll maybe come to see that *that* is the point.

In the Time of the Russias by Stella Zamvil

1 No one has read this book and you shouldn't either.

In the Time of the Russias is not a great book. It is a good book. Though, not so good that you wouldn't find a better one by picking at random in a library. It is a good-enough book.

It is definitely not a Great Book - one of those books that, whether they are any good or not, is read widely and is part of the foundation upon which later literature is built. None of your friends have read this slim anthology of short stories. Only one person has read this book according to Goodreads - me. It has never been critically reviewed. It has not been made into an e-book, and never will be. Once all the paper copies have rotted away, there will be only the snippet view on Google Books. ChatGPT "couldn't find any information" on this book. If a tree falls and nobody is around to hear it, does it make a sound?

This review would have been much easier if this was a Great Book. I could have read other books by the author, and perhaps also the author's own opinions on their work. I could have read critical reviews of the book, essays about it, and blog posts about it. And I would feel confident in doing you, the reader, a service by introducing you to a book that is as *important* as it is entertaining. Shakespeare is entertaining, but better is that the reader of Shakespeare becomes erudite - and showing off what you know is at least half the fun of knowing anything. If I had picked a Great Book, it would have been *your* fault for not liking it. Alas, this book is not one.

This review would also have been easier if this was a lowercase great book - a work of literature so excellent that my passion for it would carry you away. Is this book, then, the best thing I've ever read, the above "you could find a better one in the library" statement notwithstanding? No. Some of my favorite novels are the *USA* trilogy by John Dos Passos, *Cryptonomicon* by Neal Stephenson, *Toilers of the Sea* and others by Victor Hugo, and Knausgard's six volumes about nothing. Any of those would also have been well justified as subjects of a book review. I could have written passionately about a book that many people, but not all, have discovered. Surely some other fans of the book would have supported me in the comments section. Nope, not this book. If anyone in the comments section claims to have read this book, they are lying.

So now we come to where I surprise you with why this book *is actually great*. Well, these short stories are actually bedtime stories Alsatian crows tell their baby crows, available now through AI translation of their caws. No, but it is a collection of recently discovered short stories told by ancient Sumerians to their fellow Sumerians, even before they started writing about grain shipments. No, but this book was found in its fully published form on the moon in 1969. Maybe it was written by Cleopatra, or Secretariat, or literally 10,000 monkeys. Perhaps, decades, centuries, or millenia after it was written it predicted some recent thing - the forced sale of

TikTok, or that so many girls would be named after olives. That would be a great reason to exhort you to read this book. But I don't have a hook like that.

It really is a book that you would have no reason to read if you came across it. Don't worry, because you won't. And yet this was the book that came immediately to mind when I saw a post about the 2024 book review contest. At least it might benefit from affirmative action.

2 *In the Time of the Russias*.

In the Time of the Russias is a collection of 17 short stories by Stella Zamvil. It was published in 1985. Ms. Zamvil published a couple of other books after this. She has also since died. Z''L.

The stories are depictions of poor, rural Jews in Eastern Europe. To the extent that it forms a genre, these are stories of the *shtetl*, the small villages in which many Jews then lived. No story depicts any actual historical event, but they are generally set in the late nineteenth century and do reflect current events - pogroms, early-stage Zionism, tension between identity and assimilation, etc. The book is only 115 pages long, and the stories are short.

*Shtetl*s, or *shtetlach* if you want to be a super-Ashkenaz, don't exist anymore. They disappeared at exactly the same time all of their inhabitants did, sometime around the mid-twentieth century. In spite of that, they retain an outsized cultural salience among many Jews. Most American Jews are Ashkenazi, and most again are within a few generations removed from those that emigrated directly from the *shtetl*. Isaac Bashevis Singer, winner of a Nobel Prize in Literature, wrote in Yiddish about them. And I would be remiss to omit *Fiddler on the Roof*, which is set there.

I came across this book in 2015 in the Aloha Jewish Chapel, the synagogue that serves the Pearl Harbor, Hawaii naval base. I like browsing the libraries in synagogues in part because no one else ever does. Many are depressingly untouched. I don't think that's a uniquely Jewish phenomenon, of course, but I wouldn't have found *In the Time of the Russias* anywhere else.

I connected with this book because it caught me at the right time, in the middle of a growing desire to reconnect with my religious and family background. Although it would be more poetic, this book didn't start me on that journey. I had started it long before then, attending Shabbat and holiday services since I gained a driver's license at 17. By the time I came across this book I could learn from it, understand it, and absorb it. I could live the stories in a way I wouldn't have been able to a few years before. At this point I had known that my father's family had come from the *shtetl*s, but knowing a fact is different than an experience. Though this book may not be of Nobel Prize caliber (alright, it isn't), reading it has meant a lot to me.

3 In which the stories and their main themes are explored.

The writing is simple and never overwrought. If anything the book is *under*written, in that the stories could be fluffed and lengthened and still not be too long. That is not why I formed such a strong connection with this book when I first read it, but it enabled it. Reading *Crime and Punishment* is a pleasure and I do recommend it, but attention span aside - who can connect emotionally with Raskolnikov? Who has the time? The characters in these stories are accessible in the way they are in fables and fairy tales, without much nuance.

How does one organize a review of 17 short stories? As follows.

Note: If you are not particularly interested in the subject matter at this point, you can just skip this section. Go to Section 4 and save yourself a few minutes. Use them to be thankful you don't live in a *shtetl*.

Spoilers ahead.

3.1 Life in the Shtetl

The stories in the book are set in small villages that are rural and poor, which in Yiddish are *shtetls*. It's therefore not surprising that the most abundant theme across the stories is the character of life in a pre-modern, agricultural environment. The stories seem like they take place in the late nineteenth century, but that is in part only due to the absence of markers of later times. For the most part, life in the *shtetl*, no different than life in non-Jewish villages, changed little for centuries. References to external figures, like the Rothchilds, help define the stories as taking place in a relatively recent world.

The stories vividly describe the precariousness of everyday life in the *shtetl*. Scarcity figures prominently, as does vulnerability to weather.

Because the book was written by an American in the late twentieth century (and for the same demographic), the stories belie a respect and even reverence for the poverty the characters lived in. In *On Going to Jerusalem*, the main character packs his "few belongings" in a rag to be carried over his shoulder as he walks to Jerusalem from Ukraine. In *Summer's Idyll*, Malke's husband "never … made enough money to keep worry away. The years of her life had crept away." Two stories, *Out of Egypt* and *Schmiel Pinhas*, describe the dissatisfaction of a wife with a husband who cannot adequately provide.

Schmiel Pinhas takes place in the winter, when "the frost hung on the trees and clung on the ground, making the earth stone hard". Schmiel is happy to get out of "such painful cold" and revels in the light and warmth of his small home. But the end of the story forces him outside once more, into the "cold, dark silence". After losing his horse between villages he becomes progressively colder, until "he no longer felt the cold, nor did his chest ache as he breathed". He, of course, dies. In another story, *Nissun's Dawn*, Nissun is a young man returning to his home "through open dead fields … as the withered winter ground stretched before him". Times are hard there, but relatives in another village are unwilling to take him in. His mother reacts less

warmly to his return than he hoped: “cold light swept the spring back and winter sat in his stomach”.

3.2 Romance

The second main theme across the many short stories is not romance. That would be uplifting and joyous, which Jewish history is decidedly not. No, the second main theme is pogroms and violence. But I like to think the author would rather have had me organize the review this way.

Petrashka deals with the loneliness inherent in life in a small village (exacerbated by a tradition that relies on matchmaking). Petrashka was overlooked during her best years and now cannot find a husband. The matchmaker, Ruchel, calmly informs her that the three options she had previously advertised were now all unavailable - dead, moved away, and conscripted. The matchmaker ends their meeting by giving back the large sum of money intended to be her payment, thereby giving up. Even the local beggar “feels a wife would be too much responsibility”. As is true for the rest of these stories, the writing is relatively simple and short. But unwritten is the certainty that an unmarried woman entering middle age was an unmitigable calamity.

In *Summer’s Idyll*, the focus is on illicit romance. Sonya is married to Max but is unhappy and neglected. She begins an affair with another in the village, Peter, but only consummates it once before he is drafted into the army and killed. She resolves to teach their child “to say the kaddish, the prayer for the dead, for his father”.

In other stories, romance is less a plot device than part of the (author’s intended) description of the *shtetl*. In *The Novitiate*, the happy marriage between Lev and Marya is a consolation for his poverty and lack of opportunity. It also sets up the story for a more emotionally-charged conclusion. In *Village of the Maimed*, the village is conspicuous for its lack of it, which adds to that story’s horror. In *The Match*, a young woman conceals her romantic interest - as would be expected in a patriarchal world in which relationships are often arranged. And in *Out of Egypt*, a lonely woman courts a young widower while restraining herself from coming on too strong.

The author clearly intended that romance be seen as something extraordinary, given its potential as a source of happiness in a difficult time and place, and as something necessary, based on its effect on those who do not have access to it.

3.3 Pogroms

I respect the fact that readers of this review may be sensitive to violence. Skip this part if that is true for you - go to Section 4.4.

Right, so pogroms and violence towards Jews is the second main theme. Insofar as *shtetl* life is a setting, and not necessarily a subject, violence is the main theme of this book. Nine of the

stories feature violence prominently. In that proportion the anthology is not quite historically accurate - it is not true that most Jews lost their lives this way - but the unpredictable possibility of a group of your neighbors hacking you to pieces to celebrate Easter makes this *emotionally* accurate. I might also add that, for post-Holocaust Jewry, the idea that so many died violently but are not remembered or celebrated makes this type of event especially salient. The calculated and industrial violence of the Holocaust is difficult to imagine, but pogroms are unfortunately easier.

In most of the stories, as in real life, Jews didn't do anything to merit being killed. But in *Lyuba* a politically active young woman, Lyuba, defies her parents to join an unspecified rebellion against the czar. Her sister, Fanya, is more pragmatic and insists on loyalty. Though it is not written, the reader is led to believe that Fanya shoots and kills Lyuba to prevent her from bringing retribution on her family. This is also the only instance of Jew-on-Jew violence in the book.

In some stories, violence against Jews is a plot device all the more horrific for its banality. A Jew in these stories might meet a violent end the same way your or I might get a flat tire - an unwelcome surprise, but it happens. In *On Going to Jerusalem*, an old man walks from Europe to Jerusalem unscathed while "all the Jews - men, women, and children" back home are killed. In *Village of the Maimed* (what a title), a subdued few pages about the aftermath of a pogrom, motivation for the attack is simply assumed. In *Dunya's Dybbuk* a young woman is having a day in which "nothing was right", which gets worse in the final paragraph when a drunk cossack kills her for no apparent reason at all. And in *And Next Year* a rabbi awaits a coming pogrom, certain of what will happen.

Yet other stories explore the violence in a more graphic and emotionally-charged way. *In the Time of the Russias*, the eponymous story, depicts a group of cossacks forcing a farmer to kill all of his livestock, one by one. Then his horse. And then, though unspecified, he is made to choose between killing his family himself or allowing them to do it. In *The Doctor*, a converted Jew risks his life to warn the Jewish quarter of an impending pogrom. Somewhat inexplicably, the man he warns chooses to kill his daughters before the peasants arrive. When they do, every Jew within reach is slaughtered. For his trouble, the doctor is as well.

The most violent story of the book has stayed with me for years. *The Novitiate*. Lev, a Jew, and Vasha, a Christian, were boyhood friends. Vasha is a new priest and has come back to their village, only to find that a pogrom is in the offing. He attempts to stop it and is, of course, unsuccessful. He passes the peasants returning, "bespattered with blood, clutching uncleaned wet sabers". A baby is killed in its crib, beheaded. Lev's wife is raped, killed, and disembowled. Lev himself is alive, but without eyes or arms. The story ends with Lev's death, which is clearly a mercy.

The violence in this book is, unfortunately, necessary to narrate the experiences of Jews in Eastern Europe - even if the author does, at times, employ it almost gratuitously. A book of peaceful and happy *shtetl* stories would be about a different people entirely.

3.4 Salvation

You might expect to find plenty of references to salvation or deliverance in this book. It is, after all, about a people defined by their religious beliefs. Moreover, these people live in a time of constant poverty and threats to their existence. Well, it isn't like that. These *shtetl* dwellers were pretty used to all that by then. Nobody was coming to save them.

But there are always optimists. The old man who decides one day to (and does!) walk to Jerusalem from Lvov in *On Going to Jerusalem*. The father in *Lyuba*, who prays so fervently and incessantly that he is unaware of a loud argument in the same room. The dying man in *The Novitiate*, already witness to his family's deaths, who cries "Build us the temple in Jerusalem … Make us free!". One of the surviving inhabitants of the *Village of the Maimed*, watching a small flame and seeing within it "hope, hope deeply buried with the shoots under the earth waiting to come forth". And the rabbi in *And Next Year*, who prays as he faces his impending death.

It is painfully ironic that in most of the stories, requests for salvation are contrasted against past or present tragedy.

3.5 Identity and Practice

So far, most of the themes I've described are religion-neutral. A collection of stories about rural villagers in a past century, alternately experiencing joy and terror, might look similar if it took place in Africa, Southeast Asia, or Latin America.

Rest assured, here be Jews.

Jewish practice forms plot points in many of the stories. Observance of Shabbat defines characters in many stories, including *The Wedding* and *Summer's Idyll*. In *Out of Egypt*, Yentel's pursuit of Hershel takes place amidst the first and second nights of Passover. *And Next Year* describes the reverence a rabbi has for his synagogue and its Torah. Many characters across the stories have symbols of Jewish observance, such as a tallis or a siddur (I assume if you're still reading you have a basic facility with Judaism, so no definitions are necessary).

In *The Match*, a rebbetzin prods her husband into taking on a new student that she thinks would make a good son-in-law. He presents as an oblivious, intensely religious person - much like the father in *Lyuba*. He is tricked when the rebbetzin tells him, untruthfully, that a famous rabbi speaks highly of the boy. Though short, this story spares little in describing what such a hasidic household would have felt like.

The depictions of Jewish practice are deftly applied, such that the Jewishness of the stories is apparent while not crowding out everything else. That may not be important for a book of such limited readership, but it's a nice touch.

3.6 ???

“On three things does the world stand: on justice, on truth, and on peace.” - Rabban Shimon ben Gamaliel. So, I’ll be honest. Some of these stories made no sense to me.

Lemish’s Wife. A woman roams around, much to the consternation of her husband, is somehow kidnapped by an old woman, and then falls asleep under a bed with her naked ass in the air. Ms. Zamvil… what?

A Dybbuk in the Soup. Frimme is narrating to herself the uselessness of children who are too smart for their own good, and cannot adjust to the few opportunities available to them. Then she throws a pot of soup out the door. There must be symbolism to the soup… right?

And two of the stories seem unfinished. *The Wedding* describes preparations for a nice village wedding, which will be well attended. Until most of the guest list backs out the morning of. The two most respected members of the village go anyway, and so most everyone else does too. Which is nice, but there isn’t much more to the story beyond that. *And Next Year* could use a lot more detail, especially as to why the rabbi elects to leave the Torah’s safety to chance (predictably, he loses).

Is the lesson that, just as the divine is inscrutable, sometimes stories are too? Could be.

4 Maybe you should read this book, then?

Not in so many words. I think few people would benefit from reading this book in the way that I did. It stayed with me for years after I read it - in large part because of where I was in life when I read it. Not only would most people think it unremarkable, but so would I if I had read it at a different time. What hope does this book have of finding a similar reception with you?

To end the review here is to fail to drive home the point, and would make for a very unsatisfying book review. And yet, I’m going to. There is no need to write a few hundred words exhorting you to find a book you connect with, thereby insulting your intelligence in the assumption you needed to hear it. If you’ve read this far, you’ve clearly understood that the content of the book was irrelevant. Not irrelevant to me, of course, but irrelevant to you. If there is an important part of this review, it is that the most meaningful book to you is probably not the one everyone else is reading.

I liked this book a great deal, it is important to me, and yet I am not recommending it.

Good luck finding your next read!

Invisible Cities by Italo Calvino

Why Can't I Find Our Rightful Italo Calvino's *Invisible Cities* Fan Cookbook, Already?

Introduction

Well, where is it? We may as well investigate. Italo Calvino's *Invisible Cities* first came out in 1972, two years later in English. Joseph McElroy reviewed it favorably at that point, leading with the hook that this "new book" is "this time not a book of stories. Something more." And I suppose I agree–it isn't *just* a book of stories.

But I also disagree–because **it also *is* just a book of stories**. Each section of the book is bookended by Marco Polo & Kublai Khan dialoguing in his palace, and between the dialogues fall a number of 1- to 3-page city portraits, the meat of the book. The 55 cities themselves are imaginary (mostly), each one taking a woman's name: Isidora, Zoe, Hypatia, Olivia, Leandra, Phyllis, Beersheba, Trude, Theodora–for a likely sampling. And each city's portrait does qualify as its own story–one of its origin, or one of traveling through it–always one which is being told within the frame story.

These premises could have been enough, but just as notably within the structure of the book, the city portraits follow different themes, from "Cities & memory" through "Hidden cities" – and the themes themselves fall into a (mathematical? poetic?) pattern of AABABCABCD ABCDE BCDEF CDEFG DEFGH EFGHI FGHIJ GHIJK HIJKIJKJKK, if that makes sense.

If it doesn't make sense, don't worry–the book's Wikipedia page has a table of its structure. Or you can just take a stern look at the table of contents. Or ignore both tables & let the book flow naturally (as nature is full of patterns). Or ignore the headers entirely, because with so much inevitable overlap between types of city, you may as well stop having to check back which title the author has officially given.

Anyway: If everything from Jane Austen's novels to *The Witcher* series has its own fan cookbook, why not *Invisible Cities*? And if *Invisible Cities* has been adapted into everything from abstract art to an opera performed in an active train station, why not a cookbook? Alarmingly, it may not exist & we won't know why. More alarmingly, it may exist & we just can't find it.

I. The basic premise disallows it

For as thin as a book as this is, the complex structure & spare prose make it dense stuff to read. I can't read it very well before bedtime or naptime, because once my mind wanders from *Invisible Cities*, I miss city after city before noticing approximately none of it has adhered to my recent memory. In that way, I would think it similar to a cooking manual. But on the other hand, ***Invisible Cities* is itself no manual**. Kublai Khan remains in his palace, unable to follow Marco Polo's steps, sometimes fearfully claiming, "Your cities do not exist. Perhaps they have never existed. It is sure they will never exist again."

A. The format of the thing

"More than 55 recipes inspired by Calvino's world-famous *Invisible Cities*" is what our little spiky, embossed blurb should say on the front cover. More than 55 recipes, because a single recipe from each city would not allow much in the way of menu construction. At the same time, 55 cities' worth of menus makes a lot of work, and each city has to have their unique character expressed in the food.

And some of the cities are so abstract or fantastical that the culinary expression of those cities may feel mismatched or simply inedible. We take Perinthia (Cities & the Sky 4), whose astronomers designed the city to "reflect the harmony of the firmament; nature's reason and the gods' benevolence would shape the inhabitants' destinies" but after the first generation of mild-to-horrific birth defects, "Either they must admit that all their calculations were wrong and their figures are unable to describe the heavens, or else they must reveal that the order of the gods is reflected exactly in the city of monsters." Given the unsavory nature of the city, must it also repel our palate?

And should the themes be bound by some culinary technique or ingredient, to signify the underlying similarities between cities? Or is that too on the nose? Certainly they will have to arrange in order of the chapters in the book. Unshuffling the themes would make for an antithetical approach.

PBSSoCal's Artbound Special Episode "Invisible Cities" –a documentary on the opera adaptation–interviews Thomas Harrison, PhD, the ULCA Italian Department chair about the origins of Invisible Cities. He claims that in conversation, Calvino described filling a cabinet of index card ideas & descriptions; when enough cities cropped up, the author could see the themes weaving from city to city: "...some were about cities and memory, & some were about cities & desire, & some were about cities and death. And then–by taking all of these index cards–he started figuring out the structure for the book…" A cute story, if true.

But the opera itself drops Calvino's basic thematic structure, focusing only on the cities Isidora, Armilla, & Adelma, surrounded on every side with Marco Polo's & Kublai Khan's philosophical dialogues. One of these dialogues focuses on Venice, which in the book occupies a mere page–and only to note its place as the merchant's inevitable but otherwise-mute reference point for all other cities he brings forth. Polo reveals, "Every time I describe a city I am saying something about Venice," but he also refuses the Khan's request to describe it directly: "Perhaps I am afraid of losing Venice all at once, if I speak of it. Or perhaps, speaking of other cities, I have already lost it, little by little."

In the book, of course, Marco Polo formally describes fifty-five cities, plus all the cities brought up in passing during the portraits and dialogues. In the opera, the tenor Marco Polo gets only three formal city scenes, which makes Venice's dialogue (the sixth of eight total scenes) almost rear and loom over them. I understand the time limitations of live theatre, but to me it still feels uncomfortably saccharine to let them all sing about a visible city for so long.

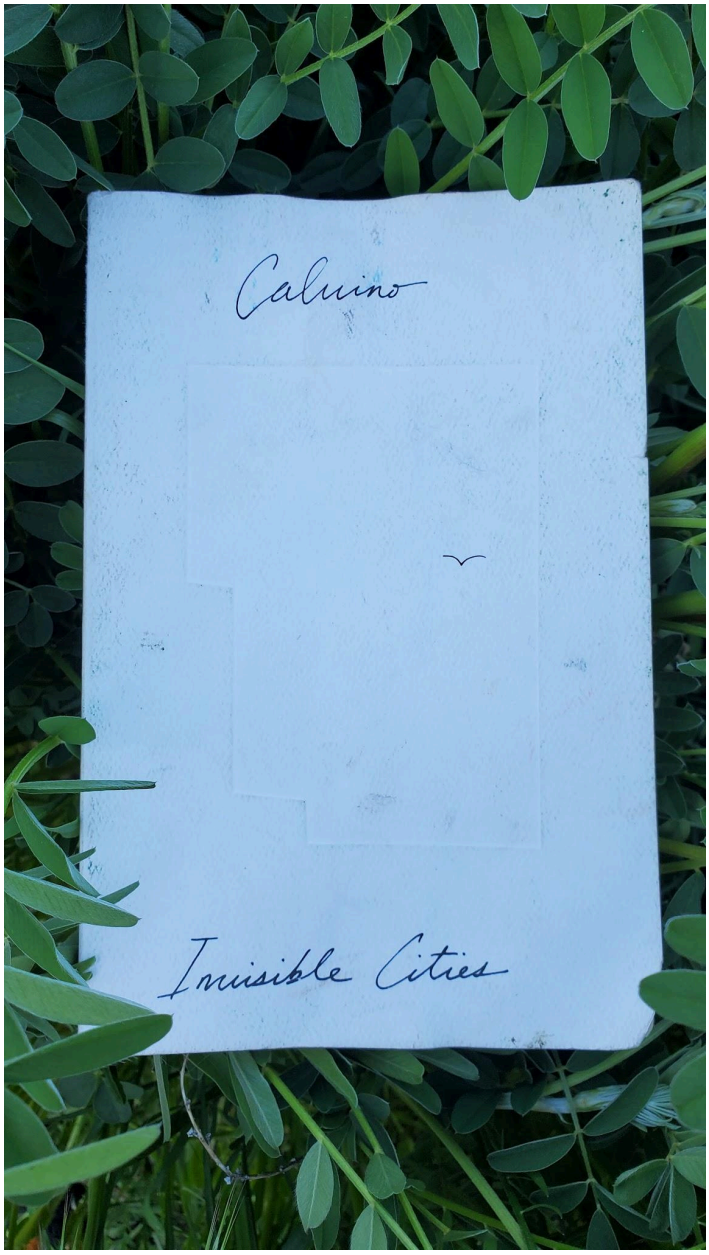
Of course, now I've gone on about the opera long enough, it will loom over the rest of my book review. Suffice to say I hope our cookbook doesn't make the same mistakes.

B. The spirit of the thing

Perhaps the strongest argument against us, Calvino's writing at large simply resists adaptation in the first place. In a 1985 interview with the BBC's Bookmark programme, Calvino's translator William Weaver backs up Calvino's own claim that his work is untranslatable: "Everything is untranslatable, but Calvino's books are particularly difficult–because although he doesn't use words that you don't know [...] he writes in a very special, very–deceptively simple way."

It's more-or-less the same with Calvino's book covers, too. Wikipedia provides a low-res cover of the original edition, an artist clearly reveling in the fantastical elements of the book, it seems to me. No, no, no–I look again–that's a Magritte, painted over a decade before *Invisible Cities*, the artist dead before the book's publication. So I guess I can't strictly hold Magritte responsible, but Calvino('s publisher) thought this pitted rock castle suspended over the air and waves had kinship with the cities described within. And in the case of portraits like Baucis (Cities & Eyes 3), *The Castle of the Pyrenees* appears in the same world: "lost above the clouds [...] Nothing of the city touches the earth except those long flamingo legs on which it rests..."

Meanwhile, here is the cover of my modern edition:



At this point the cover is as much about the places to which I've dragged it as it is the places it contains.

Very minimalistic: a bare embossed city border, punctuated only by a bird traveling through/over/down. User bias, maybe, but to me this new cover feels more tonally consistent. Because this book is as much about what it *doesn't* describe as what it does. The Khan can only project these narrated city-portraits on his blank mind's eye, their elements derived from words or objects or gestures, sometimes even a board game: "At times he [Kublai] thought he was on the verge of discovering a coherent, harmonious system underlying the infinite deformities & discords, but no model could stand up to the comparison with the game of chess." But chess does not ultimately bring clarity, either.

Anyway, since its publication, enough artists have used Calvino's *Cities* as inspiration, complex ideas typically finding form in dense architectural lines.

Representative in that style is Karina Puente, who self-describes as "one of those people who wanted to be an artist but became an architect instead" – and whose [In]Visible Cities Collection sets out to illustrate every city in the book. My mind appreciates her work but rebels at the sparse use of negative space–very little room to breathe, and that might be her point.

Another architect turned *Invisible Cities* illustrator, Matteo Pericoli, writes, "At some point of their creative process, spatial and literary narrative share a similar forma mentis, which isn't made of bricks and concrete or words and syntax, but of essential compositional ideas." His resistance to the representational in favor of understanding through cardboard models is unfortunately not ultimately reflected by his representational line drawings.

A little more Escher-like (Seussian?), Colleen Corradi Brannigan leans into mathematical complexity. The geometric shapes and color choices draw me in, though I'm less able to remember what city portrait goes with each name. Perhaps that's for the best.

Here's an abstract city I like very much, too: artist rodcorp explains,

> The diagram, a network of curved lines connecting to every other node on a 6 x 5 grid, has two configurations: if the picture is hung one way up, it shows the "Ersilia configuration" (where the lines are like the threads strung between the buildings of Ersilia); if hung the other way up, it shows that of Trude (where the lines are like a complicated airline route map).

Again, very much my personal preference (and conviction that visual minimalism jives well with the structure of the novel), but I would hang the "network of curved lines" in my home sooner than the other artists' work.

The spirit of the book is also where I think the opera finds some footing, by the way. The costumes are never fully representational across the cast, the singers' voices echo ethereally off the walls of the station & its spaces–but it is clearly a structure they never themselves describe. The audience have headphones to unite the musical elements, circulating through the station to follow characters, while the everyday commuters & campers are left with disjointed facets of production. The dances appear sometimes a bit too frenetic, but it's difficult to tell from the documentary excerpts if the excessive movement works well when punctuated by periods of rest.

To return to a culinary adaptation: **can we make a cookbook full of incomplete portraits?**

And what do we do when, on the rare occasion, Italo Calvino writes clearly about food? Of Anastasia (Cities & Desire 2) Polo tells, “I should praise the flesh of the golden pheasant cooked here over fires of seasoned cherry wood & sprinkled with much sweet marjoram” though this would “not be telling you the city’s true essence.” If I then create a recipe of the roast pheasant with thyme as a culinary interpretation of Anastasia, I assume it will seem fairly crude & fleshed out (no pun intended)--not just too densely detailed & too on-the-nose, but also not what Marco Polo believes will reveal the core of the city’s treacherous enslavement of its citizens to their desires.

As with the other adaptations, it feels more appropriate to dance in the gaps–and somehow cook as sparely as the book’s prose without ever touching the obvious. It also has to be real food that real people want to cook. We can’t just serve the front cover of my book. Much as I’d like to.

II. *Invisible Cities* food would taste weird

This sort of goes without saying. These places, other than the palace itself, are wholly fantastical, and so would their cookery. But is there anything strange enough to wholly prevent a cookbook?

A. Geographical fusion

I’m sorry to say that I only include this argument for thoroughness’ sake. Obviously trans-geographical fusion cuisine happens all the time, and for food in the medieval world it was well-rooted in the East-West trade routes Marco Polo himself traveled. It might taste weird to people outside of (& unfamiliar with) the geographical regions in question, at least. But probably not weird enough to find no interest whatsoever.

For instance, Dan Alexander + Co. blog mentions *Invisible Cities* as they consider an unwritten chapter for their book, *On the Hummus Route*, the chapter itself of Hebron unreachable. Kublai Khan’s own palace had access to chickpeas, and there are documented recipes using them (in English! Thank you, Buell & Anderson). These trade regions have access to great ingredients from all over, and it doesn’t take much of a stretch to suppose that even invisible, ridiculously-planned cities within that Khanate can have delicious food.

B. Anachronistic fusion

This argument seems slightly more likely, at a glance.

Is it just an American thing to endlessly vilify the cuisine of the 1970s–its endless Jell-O salads and weird photo props? Do we extend that scepter of condemnation to 1970s Italian food? In the pop history *Delizia! The Epic History of the Italians & Their Food*, Italian Studies lecturer John Dickie characterizes the 1970s as Sophia Loren's domain–the union of sex appeal & motherhood in food writing–meeting the advent of mass-produced tortellini, a dish finally available to the busy masses. Sophia Loren's 1971 *In the Kitchen with Love* definitely embraces some weird photo props, but surely not any worse than Fergus Henderson's 2004 *The Whole Beast*. (The latter book's photos I am having difficulty tracking down online, I assume due to copyright. But for the nose-to-tail-curious–it's worth the interlibrary loan just for the looksee.)

Anyway, maybe a cookbook based on a 1970s Italian novel still instinctively makes us worry about tortellini salad set in lime gelatin, despite whatever normal alternatives the era may offer.

But *Invisible Cities* is specifically *not* set in the 1970s. (Not that Calvino goes out of his way for historical accuracy–just as his Marco Polo finds a reference point in Venice, so Italo Calvino is a product of his time & his table. His reference to an ancient recipe for squash flower, for instance, could not really have been squash until after the introduction of American imports.)

But here again on the older side of things–**when will we get over our mythic disgust of ancient foods?** I somehow keep bumping into the spices-just-covered-the-bad-meat-taste joke, despite historians debunking it over and over. And while it's popular to eat as the royals do, there's also a certain "eat the rich" strain that has no interest in how great leaders of the past managed to feast. Honestly, food of the common people seems more Calvino's speed, as well. And maybe our contemporaries don't trust 13th century Venetians & Mongolians about what to eat? It may be a silly barrier, I know, but it might well be what's prevented our *Invisible Cities* cookbook.

III. People who have read *Invisible Cities* just don't want a cookbook

Not that they've poured that much thought into it. Of 6,954 Goodreads reviews, I only get 23 hits for the word "food". Here they are: (or skip the list–I'll sum up the highlights after)

1. Fergus, Quondam Happy Face portrays the book as a "delectable Angel's Food Cake"–that is, of escapist fantasy. (5 stars)
2. Tom mentions "shouting food vendors and markets, [. . .] coffee shops" and the call of a strawberry seller in a tribute city portrait. (5 stars)
3. Walter Arvid Marinus Schutjens: "As an avid Dungeons & Dragons [...] player this book gave me a ton of food for thought" (3 stars)
4. Aishwarya Pant laments at the tourist's dilemma of only "eating the food and the wine someone recommended to you." (5 stars)

5. 50 Cups of Coffee describes dams providing “access to food” in Richard Dawkins’ *The Extended Phenotype*: “Perhaps too our cities are our phenotypes.” (no star rating given)
6. Paloma warns, “you’ve got to digest each city on its own the way you would take tiny bites of extremely decadent food.” (5 stars)
7. Karim Mahamed writes, “the material is solid and put together in such way that makes it food for your mind!” (4 stars)
8. Nancy Lewis quotes from Calvino’s first city, Diomira (Cities & Memory 1), “...the multicolored lamps are lighted all at once at the doors of the food stalls…” (3 stars)
9. Brian Sergi claims, “It felt especially fitting to read this as a tribute to the recently departed Anthony Bourdain; through the experience of food, Bourdain was able to illustrate the wonders of people and the places they call home, thus serving as a modern day Marco Polo.” (5 stars)
10. Quinn Monette: “Comfort food.” (5 stars)
11. Parth also excerpts the passage from Diomira. (4 stars)
12. Scott: “For those of a philosophical bent, there is plenty of food for thought here.” (5 stars)
13. Sabrina: “Beautiful, poetic, and food for thought.” (5 stars)
14. Leo Dutch characterizes the reading experience: “...the positive memories of adventure and food come to mind, but later on i remember homesickness, struggling with the heat and seeing the negative parts of cities.” (5 stars)
15. Gonçalo Matos: “Each [city] feels like a lesson, with food for thought and the most bizarre characteristics.” (5 stars)
16. Alex Lam: “Lots of food for thought - I'll be reflecting for years - but not too esoteric.” (4 stars)
17. Taylor Norman gives the Diomira quote, again. (no star rating given)
18. Linda C: “Lots of food for thought.” (3 stars)
19. Maryann portrays the book as “a cup of miso soup. I don't have it very often, so it's still exotic to me, and the little bits of onion or sprouts or whatever yumminess the cook may have put in add to the experience. It gives me pause, as something I don't consume often, and I take the time to savor it.” (3 stars)
20. Anita: “This particular text is nothing but food for thought.” (5 stars)
21. Miriam gives tip #3 for enjoying Italo Calvino’s *Invisible Cities*: “Let anachronisms (traffic islands, modern plumbing) serve as food for thought. Don't dismiss them as inaccuracies.” (4 stars)
22. Beenish Khan also references the tourist: “...look at a city in a literary way and not just the usual mix of food, entertainment, and bucket list items.” (4 stars)
23. Bookamante: “writing a review of this book is like trying to tell what food tastes like to someone else. Salty. Bitter. Sweet.” (3 stars)

No strict comment on all these reviewers' taste, if you will, but there are a few people here **who at least in some small way have adapted the book in culinary language**: an angel food cake, a strawberry vendor, a bowl of miso soup. Not a whole cookbook here, obviously, but we can still regard them as kindred spirits.

(I originally wondered if nobody really likes *Invisible Cities* at all, these days, or if nobody reads it at all, but with 4.11-stars out of 84,284 ratings on Goodreads, we can obviously shoot that down. It's not Eco's *The Name of the Rose*, in terms of reach, but it's not Buzzati's *The Bears' Famous Invasion of Sicily*, either.)

And if we believe Pericoli, from earlier, *Invisible Cities* is required reading for Italian architecture students, so we should have a reliable supply of readers–so long as formal architecture education doesn't collapse. Now if they only required it in culinary school, we'd have our object.

IV. Search engines are the worst

I must confess myself rather homespun in this regard, but in my quest to find anyone else interested in a cooking project of *Invisible Cities*, I have turned up very few candidates.

A. What *does* turn up?

Basically as close as we get is the Valerie Stivers' *Eat Your Words* installment where she attempts to "invent a series of Calvino-inspired pies, interlocking like the chapters of *If on a Winter's Night a Traveler* and utilizing tree fruits and tree nuts from *The Baron in the Trees*." Stivers makes five pies, and although she really only quotes *Invisible Cities* in support of her *Baron in the Trees* life philosophy/evaluation, it takes a sizable place in her overall reflection. Note that when she mentions "two alternate endings" she is simply referring to the two options out of the "living inferno" Marco Polo describes at the end of the book:

> There are two ways to escape suffering it. The first is easy for many: accept the inferno and become such a part of it that you can no longer see it. The second is risky and demands constant vigilance and apprehension: seek and learn to recognize who and what, in the midst of inferno, are not inferno, then make them endure, give them space.

And I should have mentioned in the "spirit of the thing" section, but this quote demonstrates it well: **all the cities in this book, all the dialogues, have this double nature.** Double-meanings intertwine, double-natures live in paradox, double-faces exist without touching. A difficult table service, perhaps.

Other findings:

The dramatic adaptation *Impossible Cities: A Utopian Experiment* mentions a cookbook in connection to the real-life Amana Colonies, a utopia under consideration.

This *Invisible City* literary journal features a poem called "Recipe" . . .

I also turned up a page from the (non-Calvino) Invisible Cities organization, which trains "people affected by homelessness to become walking tour guides of their own city and offer these alternative tours to tourists and locals." Unfortunately, the PDF cookbook it advertises has a broken link or something.

To my greatest annoyance: using Google, the keyword "cookbook" also brings up results using the word "book". Given that we're searching for something based on a famed author's book, most results in this vein actually have nothing to do with cooking. Trying to remove the keyword "book" leaves the word "novel"–after which point almost nothing remains but book reviews which manage to never mention the word "book" or "novel" (or "cookbook" for that matter).

When I substitute the word "cooking" or "recipe" or "kitchen" –Google's top hits tend to omit it, and I'm left again with book reviews. None of which, obviously, devote much time answering my question, or they'd have those terms riddled through them.

Occasionally, I forget to add "Calvino" and end up with the cooking blogs of harried travelers.

B. What about in Italian?

I do not know the Italian language, but I tried anyway. The Amazon listing popped up from my Italian keywords only because "Customers who viewed this item also viewed *Le città invisibili…*"
Italo Calvino: il sapore del racconto: Le ricette delle fiabe italiane (Leggere è un gusto) appears to feature 10 recipes based on Calvino's *Italian Folktales* collection. Despite having to pare down from 200 stories, this *ricette* equally samples different regions represented throughout that book. Not *Invisible Cities*, but another kindred project. (Unless Google Translate is really letting me down. Italian-speakers, report.)

C. Sadly, I am no SEO wizard

Overall with my amateur Internet-trawling, I know I've failed in multiple ways, because **my own previous musings** on my own barely-started *Invisible Cities* cooking blog STILL DON'T SHOW UP AT ALL. (And I tell you not just because I'm mad about it, but also so that you don't

go searching on my behalf with your own overpowered search engine skills and accidentally turn up my blog, after all. Wait to do all that till after the book review contest.)

On the plus side, that lack of hits is the only reason I feel I can write this book review without accidentally revealing identifying information. So it goes.

Conclusion

Thank you for your consideration of Calvino's *Invisible Cities* & its potential challenges for adaptation. If you haven't read this thin volume, yet, I encourage you to do so–certainly if you frequently travel, but **especially if you don't.**

Anyway, see you for my next book review, "Why Can't I Find Our Rightful Italo Calvino's *If on a winter's night, a traveler* Fan Cookbook, Already?"

Although that will probably just lead us back to Stivers' pies. Maybe I should consider its equal puzzle, given that book's opening scene:

"Why Can't I Find Our Rightful Italo Calvino's *If on a winter's night, a traveler* L.A. Union Station Headphones Opera, Already?"

It's Not The Money, It's The Land

I read this book because I wanted to understand a particular incident in Australian history.

Here's what I knew going in. Some time in the 1960s, the Australian government enforced a law that said Aboriginal stockmen on outback cattle stations had to be paid the same as their white counterparts. In theory, this was supposed to be a blow against racism. In practice, the cattle stations simply fired all the Aboriginal workers and hired white people instead.

I was interested in this because it seemed like a classic case of well-meaning government intervention gone wrong. But I wasn't sure if my vague recollection of this event was accurate, and I wanted to get the full story.

I did some googling. The Australian Trade Union Institute, predictably, refers to the equal pay decision as the result of a heroic struggle by indigenous workers against racist oppression, embodied by the evil cattle companies. The National Museum tells a similar story. The ABC describes it as a part of Aboriginal Australians' long-running struggle for equality before the law, a battle which is still with us today.

All these sources want you to come away convinced that the decision was obviously a good thing.

And, look - it feels pretty bad to disagree with this. Who wants to take a bold stand against dirt-poor indigenous stockmen, living in tin humpies with no running water, getting paid in bits of beef and tea, in favour of an international meatpacking company owned by an immensely rich British lord? Which of these people sounds like The Good Guys to you?

The whole story of Aboriginal stockmen in Australia's outback is very easy to fit into a standard leftist narrative of racist oppression, collective action, and working-class triumph. A whole bunch of Communists are involved. There's even a famous song about it - From Little Things Big Things Grow, which celebrates the Wave Hill walk-off, when Vincent Lingiari led a stockmen's strike for equal pay and ultimately the return of the Gurindji people's stolen land. It's very clear from the song who the heroes are.

But I still felt like I was missing something. So I turned to Bill Bunbury's excellent book *It's Not The Money, It's The Land: Aboriginal Stockmen And The Equal Wages Case*, which takes a slightly more complicated view.

-

The northwest corner of Australia is a very long way away from anywhere.

It wasn't until the late nineteenth century that European pastoralists began to move into the Northern Territory and the Kimberley. These were not men who had been successful back east. They came with no more than a gun, a mule and a few packs of tobacco, ready to set up cattle and sheep stations among the rivers and plains of the Fitzroy valley.

Right away this created a complicated situation with the local indigenous people.

Sheep and cattle drank from the same waterholes as the Aborigines, took over traditional hunting grounds and turned them into pastures. The Aborigines naturally assumed that they were entitled to kill and eat the new animals. The pastoralists took a dim view of this.

But the Aborigines were also the only available labour force. Bunbury describes this early period of settlement as a long process of compromise, where both sides played an active role in negotiating for as much as they could get. Sometimes there was violent resistance to European settlement, as in the case of Jandamarra - a native policeman who shot his own white colleague and led a three-year guerilla campaign against the settlers.

Sometimes they were able to work out a deal.

Bunbury emphasises the ad hoc, informal nature of the situation. A typical arrangement on a Kimberley cattle station would be for an entire group of indigenous people - old men, young men, little kids, women with babies - to set up camp somewhere on the property. (Keep in mind that these stations are enormous, and sparsely populated - there's plenty of room for hundreds of people to live.)

Some of the men would go to work on the station, learning to ride horses and mend fences. They'd work to their own schedule. They weren't a slave labour force - if they didn't like the job, they would walk off.

They were paid largely in goods - flour, sugar, beef and tea, the luxuries of the Australian outback in the late nineteenth century. The pastoralist would undertake to keep the whole community fed and clothed. No money was involved. It wasn't anything like a fair day's work for a fair day's pay, with structured hours and wages. The Aborigines worked whenever they wanted to, or could be made to. They got compensated the same way.

Crucially, they got to stay on their land. Aboriginal groups in this situation had some capacity to maintain a traditional lifestyle, to hunt and gather as they'd been doing for centuries, to steer the boss away from building over sacred sites. Bunbury thinks this is extremely important - you can tell from the name of the book.

-

This is a book about the growth of the state.

In the nineteenth century, the Australian government had very limited power to assert control over cattle stations in the Kimberley. There are policemen, but not a lot of policemen. Sometimes indigenous people are captured, chained and subjected to trial in a language they don't understand, then deported to prison on Rottnest Island, thousands of kilometres away. It doesn't really make sense to do this but the state has to demonstrate its validity any way it can.

The power relationship between the pastoralists and their indigenous workers is constantly being negotiated. It's not standardised at all. Some bosses are good, some are monstrous. Sometimes, indigenous people are beaten, massacred and sexually abused. Other times, they're able to work out a reasonably stable way of life.
Bunbury in no way idealises this situation. He's not describing the pastoralists as white saviours. What he continually tries to do is represent all the people involved as individuals, making tough decisions under conflicting economic and cultural pressures. He doesn't think the situation was good, exactly, but he thinks it was a compromise that worked.

Aboriginal workers on the cattle stations were getting ruthlessly exploited, by the standards of anyone else in the country - but they didn't know that. They didn't have any sense of what it would mean to work a standard day for a standard wage. And the pastoralists were determined to keep it that way.

It wasn't until WWII that this began to change.

Indigenous people from the Kimberley got involved in war work, where for the first time they were treated as something approaching equals. They were integrated into the vast industrial apparatus of the Allied war machine, and it changed the way they understood the world.

In 1946 there was a strike in the Pilbara, coordinated by Aboriginal lawmen and a white Communist named Don McLeod. The strikers asked for a minimum wage of thirty shillings plus their keep. The Seamen's Union placed a solidarity ban on wool exports from the Pilbara town of Port Hedland. The mainstream press ignored it, but it was covered by the *Worker's Star*.

Bunbury seems pretty ambivalent about this.

On the one hand, it was a partial success. Indigenous workers did end up getting paid more. And Port Hedland was a viciously racist community - it's impossible not to feel sympathy for the strikers when they're getting locked up and chained like animals.

But equality under the law has its downsides. Bunbury is clear that this was not a case of, like, Communist agitators stirring up an otherwise quiescent and peaceful people. The Aborigines themselves were unhappy with their situation, with being harassed by police, beaten with stockwhips and generally treated as subhuman. They saw trade unionism as a potential way out.

Bunbury shares their enthusiasm. He feels the same righteous anger as they do. But he also knows how it ends.

-

Australian trade unions have always had a complicated relationship with Aboriginal workers.

Remember that this was the period of the White Australia Policy, strongly backed by the Labor Party, intended mostly to keep out Asian and Pacific immigrants who would otherwise bring down wages for the average working-class white man.

The Communists were broadly opposed to this. They wanted to unite the global proletariat - to build solidarity across all the workers of the world, not merely the whites. But they represented only a very small part of the Australian trade union movement. Businesses opposed it, too - wanting to import cheap Chinese labour - but the public backed it, and they won.

(A lot of the Australian national character, in my view, can be traced back to the strength and conservatism of the trade union movement in the early 20th century. We would be a very different country today - perhaps less stable, but also less risk-averse and complacent - if we'd allowed mass Chinese immigration from the beginning. But that's a digression.)

In the 20s and 30s, Bunbury writes, Australian unions fought very actively to kick Aborigines out of work. They wanted the stations to employ white shearers at white shearer's rates, not Aboriginal shearers for the price of a cup of tea. They stopped drinking beer in hotels that employed Aboriginal people, and tried to ban black workers from running power plants and engines, on the basis that they were illiterate and would inevitably stuff it up.

They resented indigenous labour for the same reason they resented Chinese labour - indigenous people worked cheaper, and they thought that wasn't fair. Equal pay was a double-edged sword. Its intended beneficiaries, from the old-fashioned union viewpoint, were not the Aborigines but the whites.

All this is important background to understand what happened next.

-

In 1965 the Northern Australian Workers Union, a small Communist-dominated group with a long history of support for Aboriginal rights, brought a case before the Conciliation and Arbitration Commission, which was in charge of handling industrial disputes under Australian labour law.

The union argued that the award rate for pastoral workers - an industry-wide minimum wage standard - should also apply to Aboriginal workers. No longer could the cattle barons get away with paying people in beef and tea. The old compromise had to be broken up. Aborigines had to

be paid in money, on a daily wage, in the same way and to the same standards as everyone else.

The pastoralists presented mountains of evidence that this would be a disaster. The union's case was basically: listen, mate, it's the law. The Commission went away, thought about it, came back and ruled in favour of the union.

Bunbury sympathises with the Aborigines. He is clear that the pastoralists were, in many cases, exploitative and cruel. His book is full of personal testimonies from people on all sides of the argument, showcasing the immense difficulty of the situation.

Some of the most interesting testimony comes from Hal Wootten, a lawyer working for the pastoralists. Wootten's sympathies are naturally in favour of equal wages. He wants to go to work for the union, but they're uninterested in making a serious case - believing instead that the justice of the matter is self-evident, and they can't possibly lose.

Like most Australians of his day, he knows almost nothing about Aboriginal people. He wants to find out more. So he goes to work for the pastoralists instead. He's very aware of his own position - he says quite consciously that he was caught up in "the general liberal ideology of the day".

He visits the stations, meets some of the Aboriginal workers and becomes excruciatingly conscious of the total impossibility of communicating with them in any way. "My most abiding memory of the case," he writes,

> "is the scene on the station with some Aborigines demonstrating some work in stockyards. On one side the rest of the Aboriginal community silent, uncommunicative, not making a sound, and on the other side all the white fellows in the case, the union representatives, the judges, the Commonwealth representatives, the pastoralists and absolutely no interaction or communication between the two groups."

He becomes convinced that the entire system of liberal equality, backed by the Australian state, is being imposed on indigenous workers without their understanding or consent. What they want, as Bunbury argues, is not just money but land. They want to live in traditional ways on their own sacred sites, as part of a holistic community. And this isn't fungible. It can't be made to fit into the system of award rates.

Wootten describes the pastoralists as having a "feudalistic" attitude to the Aborigines on their land - treating them as peasants, as natural inferiors, but still maintaining a friendly and even respectful relationship.

The Commission is caught in a bind. On the one hand, it understands the arguments of the pastoralists. It's in no way convinced that extending the minimum wage law will actually benefit indigenous people.

On the other hand, the union's case is clear. A government founded on the principle of equality, in the liberal atmosphere of the 1960s, cannot make decisions based on race. "There must be one industrial law," it writes, "similarly applied to all Australians."

The feudal relationship that Wootten describes is obviously ripe for abuse, and deeply offensive to enlightened liberal sensibilities. It may still be better than the immediate alternatives. But the Commission can't allow it to exist.

-

So the call gets made to change the law, and the inspectors head out to the stations to see that it's enforced.

Bunbury interviews one station owner about the transition. Before the law, he's supporting around three hundred people at a rate of about a pound a month. Some of these people are stockmen, some are children, some are old blokes who just do odd jobs around the house.

After the law, he has to select about fifteen people and pay them whatever the award rate is. He can't maintain an economic relationship with a whole community, all beholden to each other in a complex web of social obligations - he has to single out a few workers and pay them as individuals, then hope they support everyone else.

The law's designed for individual breadwinners - it can't handle whatever the Aboriginal family structure is. It assumes you're going to have one male worker maintaining his individual accounts, supporting a wife and a couple of kids. The Aboriginal communities on the stations are not built like that. I don't know how they do work, really - it seems very difficult to even communicate across some of these cultural lines.

Still, they muddle through. I get a little confused about the details here. It seems like some stations made an effort to make sure that the Aborigines could stay on their land, building schools and devaluing their properties by handing over parcels of land to the State Housing Commission. Others get the guns and dogs out and just tell them to fuck off.

By the mid-1970s the outback towns of Halls Creek and Fitzroy Crossing were surrounded by squatters' camps. Thousands of people living in cars and dirt shacks, in conditions of third-world poverty, with no work and no means of support beyond welfare.

A lot of these people have never seen a town, even a tiny one like Fitzroy Crossing, and have no idea how to interact with it. They don't know how to walk by the side of the road, how to spend money in a shop, how to talk to a policeman. They have no reason to know these things. They obviously can't get a job - the best work around is on cattle stations, and the cattle stations legally can't employ them at a rate they are willing to pay.

They're bored, lonely, depressed, homesick and drunk. They've been living in the desert for thousands of years - they can't just wake up one day and become fully assimilated subjects of Western industrial capitalism. Without the land they have no future.

-

What is supposed to happen here, according to the worldview of the 60s liberal reformer?

You can always say the state "should have done more". To this day this is a recurring theme of the conversation around Australia's indigenous policy. We should have provided jobs for them, we should have given them an education, we should simply have spent more money and done more liberal intervention until the whole thing got sorted out.

You can always say they should have listened more to indigenous people. This is more or less Bunbury's conclusion. He argues that the Commission should have made more of an effort to find out how the Aboriginal communities on the stations felt, to realise that the land meant more to them than the money and the white man's law couldn't cover their needs.

This seems kind of true, although difficult to put into practice. The Aborigines on the stations don't always have a strong sense of what "money" is - how are they supposed to make decisions about award rates and government inspections? And it gets into a whole tangle of arguments about who's actually empowered to speak for indigenous people - which, again, is a massive recurring fight in Australia.

You could of course argue that Aboriginal people should get their land back from the cattle barons.

This did in fact occur. In response to strikes like the Wave Hill walk-off - trade union actions led by and for indigenous people - Australian governments began to pass a whole series of land rights laws, granting Aboriginal communities direct control over their own properties. I have no idea how well or badly this went and it's a little outside the scope of the book.

But it's a logical next step. The equal pay decision seems to have objectively made matters worse. You can do nothing, but that's not very liberal-reformer of you - and also, it seems clear that indigenous activists like Vincent Lingiari are themselves calling for justice.

It's not 1890 any more - they're joining unions, they're getting law degrees, they're coming to see themselves as your equal. Are you going to tell them to get back in the humpy and go back to working for scraps?

Bunbury tells the story of the Noonkanbah people. They're driven off an unprofitable cattle station in 1971, and wash up in Fitzroy Crossing, drunk and unemployed like everyone else. They decide they want their land back.

With what Bunbury describes as “considerable” government help, they’re able to buy the station for themselves and set it up as a working cattle operation. It’s still in operation and seems to be doing reasonably well, all things considered - not a raging success, but at least it works.

-

Could all this have been avoided?

Bunbury tells this story with a sense of grim inevitability that I’m not sure is totally justified. The equal wages decision was, by all accounts, just bad. You can’t make a case for it, even from a lefty point of view. It ruined stable communities, forced people into poverty, created huge amounts of unnecessary misery and despair.

To this day a lot of outback towns are full of homeless Aborigines, living in creek beds, plagued by crippling alcoholism and clearly unemployable for life. Bunbury argues that the equal wages case is a big part of the reason why. We can’t blame these people for being unemployed; in 1966, we made it illegal for them to work.

Of course it sounded good to the Communists. I don’t think it’s even their fault. There’s always going to be a few Communists who campaign for Communist-sounding things, on the basis that equality is good. The problem is that governments are supposed to make decisions on a slightly stronger basis than “this sounds good, therefore it must be”. And apparently they can’t.

A lot of the people Bunbury talks to say something along the lines of “the decision was terrible, but it had to happen. Maybe we could have done it better, but we had to do something. We couldn’t leave it alone.”

Having done something, you then have to do something else. You have to do land reform. Land reform kind of works, but it doesn’t close the gap. So then you have National Sorry Day, and land acknowledgments in every meeting, and the Voice to Parliament referendum, and some kind of Treaty-of-Waitangi-style arrangement that the state governments are supposed to be putting together.

The endgame for a lot of activists is total indigenous sovereignty. I’ve never been sure how this is supposed to work. Do we just cede the entire Northern Territory? To who? Aren’t there a bunch of post-colonial countries already, and don’t they continue to have problems?

But there appears to be a kind of internal logic to the state that says you’ve got to do something. If there are problems, the state has to solve the problems. If the solution to the problems creates more problems, the state has to solve those problems as well. It’s hard to just stay still.

-

This is not the book I wanted to read on this subject. The book I want to read on this subject is a thousand pages long and covers the entire history of the Australian workers' movement going back to the First Fleet. Robert Caro would have to do it.

The reason Australia has such strong minimum wage laws, set by collective bargaining across entire sectors, is because trade unions fought for them and won. At their high point, in the 50s and 60s, the unions represented well over half of the Australian work force. They were capable of getting what they wanted, and what they wanted was better wages for their members.

The equal wages decision was not just the fault of a few well-meaning but basically stupid lefty reformers. It was the consequence of millions of blue-collar workers rationally pursuing their self-interest through collective action. To prevent it from happening, the men on the Commission would need to have made a deliberate decision to set themselves against the tide of mass democracy - the very system that guarantees their right to rule.

Of course in the long run, union density collapsed and all the jobs went to China anyway. Now the activists and reformers are the driving force on the left, creating their own internal teleology that's hard to fight against. You have to do progressive things, because you just have to do them, because you have to.

Bunbury basically accepts this. The conclusion he draws is that the government should have done better, that it should have listened more closely to indigenous people - not that it should have stayed out of the whole situation.

I sympathise with this. It's hard to imagine an Australia where the entire process of social democracy simply didn't occur - where there was no worker organisation, no trade union movement, no White Australia and no minimum wage laws. Maybe it was all historically inevitable, and we do just need to go all in on land rights. I can at least see the argument for it. I would say that reading this book gave me a much better understanding of why the Voice referendum was a thing, and why the whole conversation about indigenous sovereignty operates the way it does.

But it's also clear what the limits of this process are going to be. And it does seem pretty conspicuous that the market had already worked out a functional solution to the problem, a deal that let indigenous Australians keep stable jobs on their own land, long before the government got involved to say those jobs weren't good enough and screw the whole thing up beyond redemption.