

FRESH OFF THE PRESS: NON-FICTION

There will be darkness again

Cosmologist Katie Mack offers a sobering prediction about the end of the universe

SHADMAN IQBAL

As humans we teeter on the oddest of precipices. We are only animals: apes unusually adept at surviving Earth's harsh playbook for life. Like the multitude of organisms we share it with, we live, multiply, and without exception, we die. But along the way our pattern-seeking brains, so adept at faces and tell-tale signs of the wilderness, stumbled onto something that dwarfs all life on Earth, and then some. We saw the sun rise, and rise again; we saw the stars persist in their baffling nightly routes, and slowly began to piece together the wonderfully vast cosmos.

In her book *The End of Everything* (*Astrophysically Speaking*) (Penguin UK, August 2020), cosmologist Katie Mack ponders briefly on how we have grappled with our place in its seemingly timeless odyssey. Even as she begins with Robert Frost's harrowing prose: "Some say the world will end in fire, some say in ice...", her gaze extends far beyond the poet's horizons.

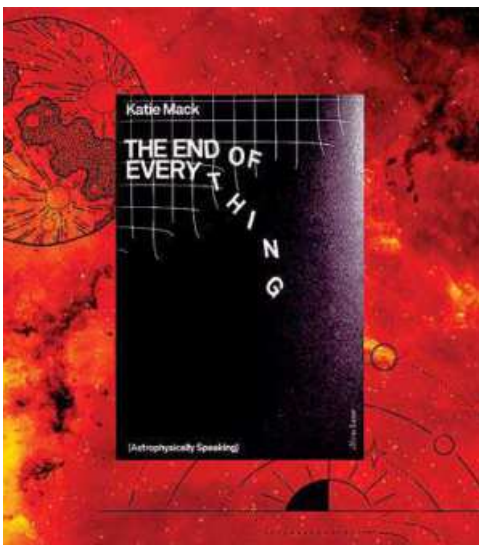
"Definitely fire." And the case is closed. The next step in our sun's journey is its red giant phase. The forecast for our tiny cosmic home is clear: molten hellscapes and oblivion. And as for the universe, there are no happily-ever-afters in sight.

Dr Mack studies cosmic evolution through "time" (a murky concept at such massive scales) and what we know of its beginning

and end. The sheer grandeur of scope means the roles of cosmologists become highly specialised and vary greatly. There are theorists, experimentalists, and a gamut of creatures in between. As a phenomenologist, Mack sits somewhere near the middle, walking seamlessly between faculty doors and offering up a sweeping panorama from the cutting edge of science. It is as close as we will likely get to a cosmic truth.

As it stands, the data we have combined with our current physics leads to five likeliest possibilities. The smallest tweaks to how we interpret this data lead to vastly different endings: from a "cold and beautiful" heat death, to an ever-expanding bubble of annihilation that may be upon us next Sunday. I say "endings" quite literally. It is the one thing these disparate roads

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DESIGN: SARAH ANJUM BARI

have in common.

Yet the book is somehow far from a morbid read, and quite beginner friendly. Much of science communication is the legerdmain of making highly technical concepts accessible without the only sensible way to describe them: mathematics. Many pop-science books, in an effort to dazzle (and thus sell) can succumb to the lure of taking poetic liberties with the science.

Mack manages the gargantuan task of sticking the universe inside 200 pages without committing this cardinal sin, or without drowning us with esoterica. Deeply mathematical objects like symmetries and quantum field theories are described with refreshing clarity as she tightropes expertly across a field riddled with unknowns and open questions. As insignificant as our roles are in the universe's comings and goings, there is undeniable, inordinate joy in the privilege to understand some of it.

This joy permeates her entire book. What we get is not simply an appendix to the classics of the genre. Instead of Carl Sagan's transportive prose or Hawking's dense compendiums, we are offered a fresh new take on science communication. Many cosmologists grow desensitised to the initial shock value of what they study. But Mack lives comfortably with the vertigo. Her style is personal and her voice shines through, scintillating in snarky footnotes and curious tangents that suffuse the entire experience with the familiarity of your favourite professor on a passionate rant. You take the sidecar on her freewheeling trip through the cosmos, with many pitstops. But these only add to the wonder, and you cannot but be transfixed. Most cosmologists would not fancy

themselves philosophers, but it is an inescapable consequence of their work to inspire art and philosophy. (If any of you've loved Hozier's song "No Plan" but paused confusedly at the lines, "As Mack explained, there will be darkness again", it's our friendly neighbourhood cosmologist making a cameo.) Even as it veers into abstraction and far beyond our discernible realities, the first urge to delve into cosmology comes from the same itch that drove Frost to poetry and Van Gogh to his starscapes. So sometimes, cosmologists do sit down and talk about what it all means.

This is what makes the epilogue shine. The day is done, measurements made, and we are flies on the wall. They muse about what it means to be so little in this indifferent vastness, if legacy has a place in it, and what endures beyond destruction. What does one do in the face of unwavering oblivion, when we do not get to keep any of the things we've worked so hard to learn? Well, cosmologist Renee Hložek puts it best: "The whole point is that you understand it, and then you enjoy it, and then... 'so long and thanks for all the fish.'"

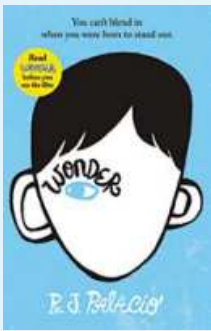
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THE SHELF

BACK TO SCHOOL: Campus novels worth revisiting

DS BOOKS DESK

Instead of the thrill of meeting friends and professors in a bustling, energised campus, going back to school only involves a computer this September. We miss the campus, don't we? Perhaps these five books, each portraying student life from school to university, can let us live vicariously while we attend classes from home.

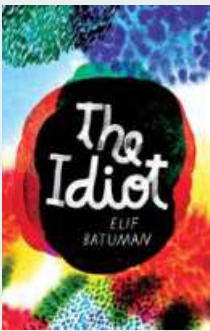


WONDER
R J Palacio

10-year-old Auggie is about to start 5th grade. Being born with a facial disfigurement, he has been home schooled his entire life. But his first encounter with children his own age involves taunts and bullying, but also, eventually, kindness. The book starts out from Auggie's point of view before switching to that of his classmates, and this is what makes the storytelling so poignant. It etches the portrait of a community grappling with difference, and the compassion that requires. At the same time, the novel investigates the roles of status and popularity in a school setting, where children are often driven by an impulse to bully.

NITU AR TAR BONDHURA
Muhammed Zafar Iqbal

Nitu finds herself trapped in an oppressive boarding school. Set within an eerie school campus, Iqbal's narrative explores the issues of freedom of speech, self-expression, and totalitarianism, as Nitu and her gang grow from confused little children to assertive rebels, in their quest to uncover secrets about their tyrannical headmistress and a missing school teacher. The book might seem best suited for school-age readers, but for those of us still kids at heart, *Nitu Ar Tar Bondhura* packs more than enough nostalgia and whackiness to satiate anyone who loves school campuses.

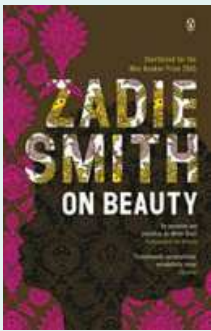
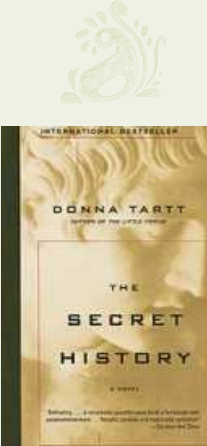


THE IDIOT
Elif Batuman

Selin, a Turkish-American freshman, has just arrived at Harvard University. Beginning college life in the mid-1990s, she discovers the internet and wants to know what books really "mean"; she observes how each person reacts differently when faced with a language they don't understand, and how she herself is shaped by her native English and Turkish. More than Batuman's plot and characters, *The Idiot* is memorable for Selin's perception of classic elements of university life—books, pastries, conversations with strangers—all filtered through a fascination with language, ideas, and the uncertainties of being a newly minted young adult.

THE SECRET HISTORY
Donna Tartt

"The snow in the mountain was melting and Bunny had been dead for several weeks..." So begins *The Secret History*, rife with all the juicy elements of a creepy campus novel: A murder mystery. Hedonism, inspired by an obsession with classical Greece. A brilliant, venerated professor. And a secluded, selective liberal arts college in Vermont, based on the real life Bennington College where author Tartt attended along with Bret Easton Ellis and other literary enigmas. All of this, narrated unreliably in a Nick Carraway-esque narrative, is what make Tartt's book coil tight with tension even as the secret is revealed in the very first page.



ON BEAUTY
Zadie Smith

This one is for the teachers—the academics, researchers, and their families who reside on college campuses—rich with a diversity of voices, cultures, and feuding ideologies. The Belseys have just moved into a Massachusetts college town and the father, a white left-wing English Rembrandt scholar, is at loggerheads with Sir Monty Kipps, a West Indian intellectual with conservative views. As they spar over art, religion, and multiculturalism, their young adult children brew their own mix of shifting ideologies, picking and choosing from the rival side. The result is a moving portrayal of family life, so often intimate yet inevitably porous.

BOOK REVIEW: YA DYSTOPIA

Submission and surveillance in Suzanne Collins' dystopia

Why *The Ballad of Songbirds and Snakes* is a prequel done right

SHABABA IQBAL

Twelve years ago, Suzanne Collins introduced us to *The Hunger Games* (Scholastic Press), a dystopian world where children fight to their televised deaths in a brutal annual competition. The story is set in the fictional sovereign state of Panem, comprising of a federal district at the Capitol and 13 outlying districts. Collins' prequel, *The Ballad of Songbirds and Snakes* (2020) takes us deeper into this widely popular post-apocalyptic world, emphasising how much media and political control shape our decisions as a society, and how political and surveillance systems become more complex over time.

Ballad begins with the 10th Hunger Games, 64 years before Katniss Everdeen volunteers as a tribute in *The Hunger Games*. The Games are now minimalist: they feature two children (tributes) from each of the 12 impoverished districts, who are thrown untrained into an arena with weapons

happens subtly, gradually. Snow struggles with his beliefs and actions, but repeatedly finds a way to justify himself. The text—as separate from its narrator—does not.

Unlike in the trilogy, here Collins makes us voyeurs. We watch the Games via camera, as young Snow does, desensitised to the suffering of the tributes. This brings us closer to understanding a protagonist who is snooty and ambitious to a fault. Decades later, at the 74th Hunger Games, Katniss will marvel at the high-speed train that brings her to the Capitol and the medicine that saves her life in the arena—inventions that the Capitol hoards while district residents die of starvation. Snow's government will tap their phones, monitor their houses, and use technology as a means to taunt the oppressed.

To witness this transition—from Snow's simpler sinister days to his rule of stifling exploitation—is to understand just how much Collins' fiction is true to our times.

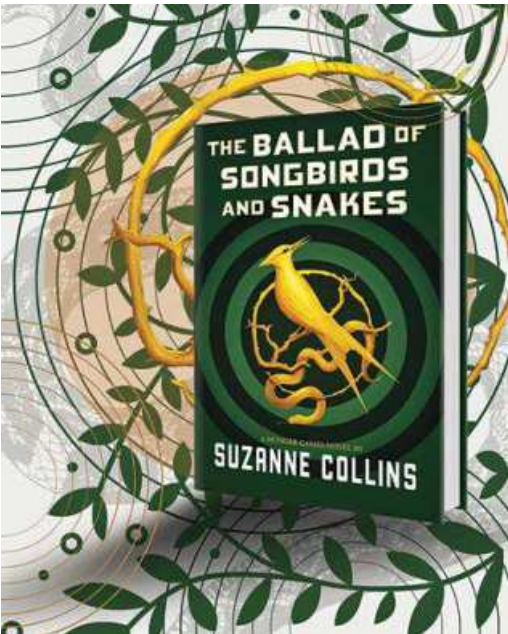
Across the books, Collins confronts us with our uncomfortable similarities with the people of the Capitol, who profit from exploiting the poor and use popular media to distract citizens from the consequences of their lifestyle. This consumption of exploitation is a valid criticism of our entertainment industry which monetises trauma, and gladly puts ratings and sensationalism over honest accountability, increasingly blurring the lines between the shocking and the entertaining.

Meanwhile, we continue to use online platforms such as Google and Facebook which infamously collect our personal information and sell them to advertisers. For authoritarian and democratic governments alike, the potential for abuse presented by advanced online surveillance is staggering. Activists and journalists who might otherwise hold them to account are forced to self-censor, while dissidents and members of marginalised communities think twice before discussing their struggles or political opinions openly.

As we live and breathe through such times, willingly following the surveillance status quo, Collins' dystopian world does not seem too far-fetched. As a prequel, *Ballad* helps raise questions about the horrors that we are willing to accept and justify to ourselves, and reminds us that many nations are still suffering at the boot heels of governments like President Snow's.

A longer version of this article will be available online. Follow Daily Star Books on Facebook and @thedailystarbooks on Instagram for more updates.

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DESIGN: KAZI AKIB BIN ASAD

and forced to fight to their deaths. This early arena isn't the as magnificent as the wild forest of *The Hunger Games* or the eerie clock-shaped landscape of *Catching Fire* (2009). It is a broken down, bombed out stadium. The tributes have no tracking devices and the cameras haven't yet begun to follow them around all the time. Under the guise of inspiring unity, 24 students from the Academy—a high school for the Capitol's elite—are selected as mentors for the tributes. Among these students is 18-year-old Snow, who will become Panem's president and the main villain of Collins' original trilogy.

Collins isn't interested in making Snow a protagonist to root for, however. His degeneration