

## BOOK WORLD

NATURE REVIEW BY ADRIAN WOOLFSON

## The insects that seem to defy physics — and have humans under their spell

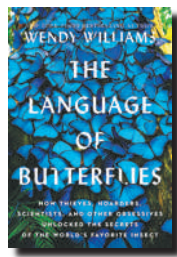
For many, insects are an annoyance and at best an inconvenience. They deserve and even demand to be dispatched to an abrupt and untimely demise. In Victorian England, on the other hand, insects were so revered that documenting and cataloging them became a popular and passionate pastime. The eccentric banker Charles Rothschild is said to have stopped a train to allow his servants to capture a rare species of butterfly that he had spotted from a window. His daughter Miriam Rothschild, in between determining the mechanism by which fleas jump and establishing a dragonfly reserve on her estate, became a leading authority on the monarch butterfly, which she described as “the most interesting insect in the world.”

In her glorious and exuberant celebration of these biological flying machines, “The Language of Butterflies,” Wendy Williams takes us on a humorous and beautifully crafted journey that explores both the nature of these curious and highly intelligent insects and the eccentric individuals who coveted them. En route we discover, among other things, the remarkable interconnectivity of living things, the deceptions that insects deploy to trick predators and the complexities that present a significant challenge to our attempts to conserve the rapidly disappearing natural world.

The beguiling nature of butterflies, in particular the more extravagant ones such as the monarch, issues from the remarkable “flash and dazzle” of their wing patterning and coloration. For some enthusiasts, the wings of a monarch invoke an almost metaphysical sense of exhilaration similar to that experienced while observing the stained-glass windows of a cathedral. Indeed, Williams enthusiastically asserts that the monarch’s wings are nature’s version of Paris’s Notre Dame. She rapturously describes the trays of dead butterflies housed at Yale University as “kaleidoscopic assemblages” that are “so sensuous, so entirely luscious” and reminiscent of a Turner seascape.

The illusive and enigmatic pageant of color generated by butterfly wings arises, in part, from the way the tiny scales covering the wings play tricks with and manipulate light, while also functioning as optical filters. The brilliant blue hue of the blue morpho butterfly, for instance, is achieved in a unique manner. Rather than synthesizing pigment, the scales selectively remove light of every other wavelength, leaving only blue. Its unique clarity, Williams informs us, is reminiscent of the vibrating and shimmering blue of Mary’s dress in Michelangelo’s Holy Family, housed in the Uffizi Gallery in Florence.

While a lepidopterist — an expert in moths



**THE LANGUAGE OF BUTTERFLIES**  
How Thieves, Hoarders, Scientists, and Other Obsessives Unlocked the Secrets of the World’s Favorite Insect  
By Wendy Williams  
Simon & Schuster.  
256 pp. \$26

The tiny scales on a butterfly’s wings manipulate and play tricks with light, enchanting many who study them.



RONALD WITTEK/EPA-EFE/SHUTTERSTOCK

and butterflies — is likely, in the words of the natural historian Richard Fortey, to be “as familiar with the speckles and dappling of a butterfly wing as he would be with the faces of his own family,” capturing this dynamic pattern of color has proved challenging. The explorer and first natural historian of Lepidoptera, Maria Sibylla Merian, who was the epitome of an Enlightenment woman, the au-

thor of the best-selling “The Wonderful Transformation and Strong Floral Food of Caterpillars” (1679) and the discoverer of the metamorphosis of caterpillars into butterflies, resigned herself to the fact that she could not re-create the dazzling brilliance and aura of butterflies with watercolors. The fleeting and ephemeral nature of the colors was affected by the angle of vision, which shifted the iridescence through a

suite of multicolored transitions in a manner that appeared to defy physics.

Although having a brain no larger than a pinhead, and weighing less than a paper clip, monarch butterflies navigate great distances. Unable to regulate their temperatures, they travel south from as far north as Canada. Williams describes how — like pilgrims walking along Spain’s Camino de Santiago — they make their way south along one of three butterfly highways toward Mexico, where they vacation during the winter months. The California coast harbors a host of overwintering monarch zones, including Pismo Beach and Morro Bay. But more than half of these have been abandoned in recent years, and the number of migrating butterflies is steadily falling. This is in part because of the loss of their habitats, which have been subsumed by intensive monoculture, orchards, vineyards and farms. It is also a result of changes in the frequency of species such as the milkweed plant that play key roles in their life cycle.

Despite their radiant beauty and often-described gentle nature, male monarchs indulge in brutal sexual behavior, knocking down females and forcing themselves upon them while they are in a half-dazed state, according to a description Miriam Rothschild provided in a 1978 essay titled “Hell’s Angels.” But close to the time of migration, their behavior undergoes an abrupt change. Instead of flitting around chasing females and feeding on nectar from flowers, they become highly social, gregarious and focused on flying south. But not all butterflies develop a travel bug. Fender blues are homebodies and do not vacation, and whereas the majority of monarchs fly back north in the summer months, a few decide to vacation year-round in Mexico.

On reviewing Charles Darwin’s “The Origin of Species,” the highly religious entomologist Thomas Vernon Wollaston noted that the existence of butterflies proved that Darwin was wrong. For how could the marvelous “tints of certain butterflies” be the product of anything but design? But in fact they offered a sound corroboration of Darwin’s theory.

While butterflies provide us with what the author Vladimir Nabokov described as “the highest enjoyment of timelessness” and teach us how life has co-evolved as a complex nexus of interconnectivities, the gradual disappearance of these magnificent creatures and the ancient secrets they invoke should shake us to the core. We must reach out to preserve the remaining fragile wildernesses before they are no more.

Adrian Woolfson is the author of “Life Without Genes.”

IMMIGRATION REVIEW BY LAURA WIDES-MUÑOZ

## How long fights and hasty decisions have shaped immigration policy

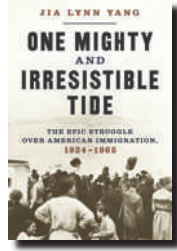
The Supreme Court this summer issued two major immigration rulings: one temporarily blocking the Trump administration’s quest to end Obama-era protections for young undocumented immigrants, the other allowing the administration to speed up deportations of people whose asylum claims have been denied. Together these rulings highlight the immense power and limitations of the presidency when it comes to setting immigration policy. Presidents can both order and dispense with rules that alter the lives of hundreds of thousands of people, even as it is Congress in the end that writes the blueprint for who can call the United States home.

Through distinct lenses, two new books underscore this long-standing tension between Congress and the executive branch and, on a deeper level, the United States’ conflicted relationship with its identity as a nation of immigrants. In “One Mighty and Irresistible Tide: The Epic Struggle Over American Immigration, 1924-1965,” Jia Lynn Yang pans wide across the often overlooked 40-year battle to overhaul racist and restrictive immigration laws passed in the early 20th century. The book culminates in the passage of the 1965 Immigration and Nationality Act, or the Hart-Celler Act, which Yang credits for her own family’s immigration to the United States from Taiwan and China — and which has become the bedrock of our current immigration system.

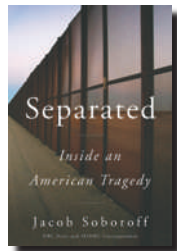
In “Separated: Inside an American Tragedy,” Jacob Soboroff zooms in on President Trump and his administration’s decision to separate children from their parents as a deterrent to border crossers. In doing so, he illuminates how, in the face of congressional inaction, a cadre of presidential advisers can introduce policies with shocking, unintended consequences.

Much has been written in recent years about the 1965 immigration law, which prioritized family-linked visas and ended the national-origins quotas favoring White Northern Europeans. But Yang, deputy national editor at the New York Times and a former Washington Post editor, digs into the tectonic geopolitical shifts that led to the law’s passage. Along the way, she reminds her audience that the current president’s divisive and at times racist, anti-immigrant rhetoric is hardly an outlier in American history.

While a Broadway-bound play, “The Melting Pot,” opened in D.C. in 1908 to applause from none other than President Theodore Roosevelt, a little more than a decade later, Yang reminds us, prominent lawmakers in Washington were calling the phrase obsolete. “We no longer are to be a haven, a refuge, for oppressed the whole world over. We found we could not be . . . and America will cease to become a melting pot,” declared Sen. David A. Reed of Pennsylvania shortly before the passage of the 1924 immigration law that bears his name. The law shut the door on immigration from Japan, the last Asian country whose citizens could still receive U.S. visas, and it slashed immigration from Southern and Eastern Europe for several decades.



**ONE MIGHTY AND IRRESISTIBLE TIDE**  
The Epic Struggle Over American Immigration 1924-1965  
By Jia Lynn Yang  
Norton.  
324 pp. \$26.95



**SEPARATED**  
Inside an American Tragedy  
By Jacob Soboroff  
Custom House.  
388 pp. \$29.99

People make their way through a U.S. border crossing at Tijuana, Mexico, last September. A 1965 law placed the first limits on immigration from Latin America, leading to a rise in undocumented migrants.

Congress’s actions carried weight across the Atlantic, where Yang describes a young Adolf Hitler heaping praise on the United States for barring “the immigration of physically unhealthy elements” and “certain races.”

Even the 1965 reform and its focus on family connections over skill sets were due in part to a core group of lawmakers who believed that the law would favor the country’s historic Northern European stream over newer influxes from Africa, Asia and other parts of the world.

Yang sketches lively portraits of the famous and obscure players behind the legislative fights, like Rep. Emanuel Celler, a freshman congressman who came to Washington from Brooklyn in 1923 and found himself a “lost soul,” aching for his wife and baby daughter, but who, like a number of Jewish lawmakers and advocates, became a stalwart defender of postwar refugees and other immigrants. Then there was Takao Ozawa, who arrived in the United States at 19 and petitioned unsuccessfully for the right of Japanese immigrants like himself to become U.S. citizens, arguing in 1915: “In name, General Benedict Arnold was an American, but at heart he was a traitor. In name, I am not an American, but at heart I am a true American.”

The book underscores how many of the nearly century-old debates over our immigration system remain in play: whether the country should prioritize immigrants with high-demand skills over those with family; whether championing immigrants comes at the expense of working-class Americans; the way immigrants are often pushed to “climb the social ladder” by acquiring “whiteness” and distancing from African Americans; and more broadly, whether our nation will cling to its Anglo-European roots or more fully embrace its growing diversity.

At times, the details of the backroom negotia-

tions become mind-numbing. And one is reminded why even historians often shed all but a few protagonists in service of a tight and linear narrative. Yet Yang’s voyage across early-20th-century U.S. immigration debates makes palpable how much diplomacy and perseverance are required to win legislative change. That it took the United States 40 years to throw out the majority of its most-racist immigration policies and modernize its system might offer some hope to those who have been fighting nearly as long to overhaul the latest incarnation of this law.

The 1965 law had another legacy: the first limits on immigration from Latin America. In “Separated,” Soboroff, an NBC and MSNBC correspondent, zeros in on the resulting influx of undocumented immigrants across the southern border and, in the absence of congressional action, the Trump administration’s response: a hastily developed policy of separating parents and children without a plan for tracking and reuniting them.

Although such separations had been carried out occasionally under previous administrations, Soboroff describes how, only weeks after Trump’s inauguration, officials began discussing whether to implement the tactic on a widespread level. The idea was that immigrants crossing illegally, and even some who presented themselves at official points of entry, could immediately be detained and potentially prosecuted for criminal entry, while their children would be whisked away hundreds or thousands of miles to shelters normally reserved for unaccompanied minors.

Soboroff quotes one Health and Human Services staffer’s email from late September 2017, criticizing the Department of Homeland Security’s operations. “They don’t understand . . . these types of cases often end with parent repatriated and kid in our care for months

pending home studies, international legal issues, etc.”

But they did understand, Soboroff insists. Many parents, who often couldn’t read the English forms they were given, would sign over their rights to seek asylum and to reunite with their children in the United States, while the children wondered why their parents had abandoned them.

With the immediacy of cable news, Soboroff attempts to reconstruct the quiet run-up to the public acknowledgment of the policy, including one official’s efforts to destroy the internal list of separated parents and children. He interweaves this reporting with his own on-the-ground work as one of the first journalists to enter detention facilities holding the separated children. And he follows Juan and José, a Guatemalan father and son seeking asylum who are swept into the maw of the separation machine.

“This place is called a shelter, but effectively these kids are incarcerated,” a stunned Soboroff tells his MSNBC colleague, anchor Chris Hayes, in June 2018, moments after witnessing some 1,500 boys being held in a converted former Walmart.

Soboroff, who acknowledges that he came to the story late, offers generous recognition to fellow journalists and the advocates who saw the looming crisis well before he did — though an index and detailed endnotes would have made it easier to keep track of their findings and given the book a heftier feel. Ultimately, the reporter is the protagonist, providing the book’s strength and emotional core, but also at times making it seem overly self-referential.

Trump signed an order to officially end the mass family separations in late June 2018, following a public outcry, though it’s unclear how many children remain separated — in large part because of poor record-keeping. Meanwhile, the administration has sought to replace the program with longer family detentions and to cut down on those even permitted to apply for asylum.

Congress is unlikely to act on immigration in the remaining months of this election cycle. And the Supreme Court’s decision to fast-track the deportation of asylum seekers means people like Juan and José could easily be sent back to their countries before lawmakers ever step in. A lasting solution to the crisis at the border must come from Congress and will probably be as hard-won this time as it was in the 20th century. As both Soboroff and Yang demonstrate, it will inevitably require a reckoning with both the history and the present story we tell ourselves about America being a nation of immigrants. “Like any myth,” Yang writes, “the idea easily goes unexamined — exalted and treated as if it were a divine, immutable basis for this country’s existence, when it is the work of human beings, easily erased by other human beings.”

Laura Wides-Muñoz is a journalist and the author of “The Making of a Dream: How a Group of Young Undocumented Immigrants Helped Change What It Means to Be American.”



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