drug-maker Sepracor spent "hundreds of millions of dollars" on the US launch of the sedative Lunesta (eszopiclone). But he offers only one example to support his contention that companies are widening their net: pharmaceutical firm Cephalon's successful effort to expand the user base for the stimulant Provigil (modafinil) from people with narcolepsy to those with sleep apnoea and 'shift-work sleep disorder'. Neither has Wolf-Meyer tracked down the associated and — he implies — growing revenue numbers for leading stimulants and sedatives. Such figures would buttress his claim that in "a few short years, excessive sleepiness may successfully become the new erectile dysfunction".

Wolf-Meyer might have delved deeper if his scope had been narrower. As it is, he covers everything from the socialization of children to sleep at the appropriate hour (think of Margaret Wise Brown's bedtime classic Goodnight, Moon) to the use and abuse of caffeine and other stimulants, and the plight of workers in Indian call centres, forced to synchronize their hours with US time. Yet in other ways, the broad treatment pays dividends. It is illuminating, for instance, when Wolf-Meyer takes us inside a Minnesota sleep clinic where medics are struggling to help a sleepless young girl already prescribed five drugs.

Implicit in Wolf-Meyer's analysis is that the medicalization of sleep is a profitdriven pursuit. No doubt economics did indeed have a big role in the rise of sleep medicine, but the author finds little room for the real benefits of some treatments. Can it be bad when medication prevents a narcoleptic from falling asleep at the wheel? And I, as a sleep apnoeic with daily work and family responsibilities, am indebted to the machine that keeps my airway open at night and prevents what would otherwise be literally hundreds of sub-conscious wakenings.

The Slumbering Masses suffers in many places from jargon. Sentences such as, "Normative desire facilitates the functioning of everyday spatiotemporal hegemony and is in turn formed through that very same hegemony" made me long for a lay-friendly translation.

But there are passages of telling clarity. Wolf-Meyer tells the story of Betsy, a woman in her 50s who fought insomnia for decades. She tried, she confesses, "lots and lots of drugs. Everything from benzo[diazepines] to Xanax, antidepressants, and all the tricyclics [as well as] muscle relaxers mixed with other drugs. And they're effective for a while, and then they all wear off."

Meredith Wadman is a correspondent for Nature based in Washington DC.



In the early twentieth century, unpaid patient labour kept Kings Park hospital self-sufficient.

PSYCHIATRY

The dispossessed

Amy Maxmen views a prizewinning film that shines a light into the dark corners of US psychiatric care.

ucy Winer checked into Kings Park psychiatric hospital on Long Island, New York, after overdosing on sleeping pills and slitting her wrists. It was 1967; she was 17. Stern nurses dressed her in a hospital gown and escorted her into a room where identically dressed women slept on the floor or leaned lifelessly against walls. The women were literally floored by antipsychotic medications that, as Winer was to find in her six months in the hospital, felt like an iron suit.

"We had been thrown away, stripped, locked up. We were disposable," says Winer, in the documentary Kings Park. Winer directed and co-produced the film 30 years after her stay at the hospital, now long abandoned. Kings Park tells a tale of mental health care that must be told, she says. The psychiatrists who are now showing it at meetings and workshops around the United States agree: last month, the New York Association of Psychiatric Rehabilitation Services presented Winer with the 2012 Public Education/ Media award. Kings Park touches a nerve.

The psychiatrists' goal is to inspire progress by conveying to mental health-care providers how it felt to be on the receiving end of deficiencies in state mental



institutions. Although the drugs administered to people with serious mental illness are arguably less dangerous now than they were in the 1960s and therapy is widely accepted, not every-

Stories From an **American Mental** Institution DIRECTED BY LLICY

Kings Park:

WINER Wildlight Productions: 2012. kingsparkmovie.com

one who needs these advances receives them. In the United States, more than 10% of people with serious mental illness are now homeless, or in prison (L. Davis et al. Curr. Psychiatry Rep. 14, 259–269; 2012).

Winer's intent, too, is to shine a light on the dehumanized patients — and overwhelmed doctors — challenged by inadequate resources for mental-health treatment. She spent 11 years creating the film to $\stackrel{\square}{=}$ explore her terrifying personal experience with mental illness as a teenager. As she turns her gaze outwards in interviews with psychiatrists, attendants and other former patients, Kings Park also becomes a history of US psychiatry told from multiple perspectives. The journey ends in the present, at the assisted-living centres and prisons where many former residents of psychiatric hospitals live. Most large state-run mental hospitals in the United States shut their doors over the course of four decades: between 1955 and 2003, the number of inpatients in them dropped by more than 90%.

Kings Park was comparable to other US state hospitals, but larger and more venerable than many. It opened in 1885 as an asylum for people with mental illness in New York City. In the 1950s, it housed roughly 9,000 patients at any one time. In the same decade, Thorazine (chlorpromazine), an antipsychotic drug prescribed for schizophrenia and other psychiatric disorders, came to Kings Park. It replaced cruder means of quieting patients, such as lobotomy and electricshock therapy, but caused slurred speech, the writhing and shaking of tardive dyskinesia and other distressing side effects, as doctors experimented with various formulations.

Understaffing occasionally led to patients being harmed when attendants rushed to quiet them. Hannelore Lehnhoff, a psychiatrist at Kings Park from 1960 to 1985, is noticeably distraught as she recalls an extreme example in which a patient seemed to have been suffocated with a pillow by nurses. Winer captures the frustration that psychiatrists felt with too little time to address the needs of so many patients, and a lack of tools to tend to those they saw. The sombre tone lifts momentarily with the news of the Community Mental Health Act signed by President John Kennedy in 1963, which outlined how small, assisted-living situations could provide an alternative to massive staterun institutions. Funding to Kings Park fell soon after the act was passed, and the hospital began to downsize. It shut in 1996.

At the assisted-living facilities visited in *Kings Park*, former patients cook, give tours to prospective residents and their families, and discuss in peer-support groups how much better it is to be needed than to be abandoned.

But such facilities were and remain rare. *Kings Park* shows how federal and state budgets were scaled back as state hospitals closed, and many patients ended up on the streets. A trembling former Kings Park resident with schizophrenia, who is now in prison, speaks to camera about how he was arrested for sleeping outside a church. In scenes at Suffolk County Correctional Facility in New York, we hear that one-fifth of the inmates have been diagnosed as mentally ill. Once more, their clothes have been swapped for uniforms.

After a screening at the American Psychiatric Association's annual meeting in May, the discussion lasted for more than an hour. For Evelyn Bromet, a professor of psychiatry at Stony Brook School of Medicine in New York, Kings Park offers a provocative way to teach history to avoid repeating it. "There are mental-health researchers who have no appreciation for what state hospitals were like," says Bromet. "Winer is telling the story of an enormous group of people who are forgotten."

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Books in brief



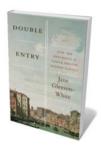
Bad Pharma: How Drug Companies Mislead Doctors and Harm Patients

Ben Goldacre FOURTH ESTATE 448 pp. £13.99 (2012)
Psychiatrist and firebrand Ben Goldacre puts big pharma in the dock.
Skewering an industry riddled with 'side effects' — from suppressed trial results to diseases invented for profit — and backed by poor regulation and aggressive marketing, Goldacre also offers pragmatic solutions. Further exposure of a seam mined by, among others, Marcia Angell, former editor-in-chief of The New England Journal of Medicine (The Truth about the Drug Companies; Random House, 2004). Hear an interview with Goldacre at go.nature.com/huccmd.



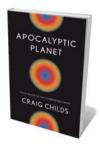
On The Map: Why the World Looks the Way it Does

Simon Garfield Profile Books 468 pp. £16.99 (2012)
The sixteenth-century Mercator world projection has aged well —
Google Maps uses it. Cartography, asserts Simon Garfield, evolves
endlessly but is rooted in enduring needs: to discover frontiers, plot
progress, keep our bearings. The myriad maps he shows are doorways
into key moments in cartographic history, from Venetian monk Fra
Mauro's 1459 world map, the last hurrah of the medieval planisphere,
to Gordon Home's ruler-like rendering of Roald Amundsen's 1911
route to the South Pole. Disease mapping, brain mapping, gaming —
charting the world has morphed into mapping worlds within worlds.



Double Entry: How the Merchants of Venice Created Modern Finance

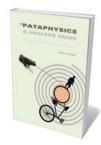
Jane Gleeson-White Allen & Unwin 304 pp. £12.99 (2012) Intrigued by the economic engine driving Renaissance art, Jane Gleeson-White crafted this gem of a history. It hinges on monk Luca Pacioli, who published the first treatise on double-entry bookkeeping — a mercantile system underpinning today's global economy. There are intriguing circularities: Pacioli probably learned mathematics from artist Piero della Francesca, then helped Leonardo da Vinci with linear perspective. Gleeson-White traces the system's impact through Keynesian successes and today's high-finance excesses.



Apocalyptic Planet: Field Guide to the Everending Earth

Craig Childs Pantheon Books 368 pp. £17.46 (2012)

Mass extinctions, eras of "equatorial seas bobbing with slush", wall-to-wall desert — Earth's cycles of destruction, science writer Craig Childs reminds us, are dramatic, relentless and constant. Which end of the world will be next? Childs travelled to nine apocalyptic places for a taste of possible future cataclysms. Each snapshot is research-rich: we get the swirling of warm air cells towards the poles on a trek in North America's Sonoran Desert, and the "genetic exhaustion" of lowa on a gruelling hike through vast cornfields. Science shot through with real lyricism.



'Pataphysics: A Useless Guide

Andrew Hugill MIT PRESS 296 pp. £17.95 (2012)
For a science that doesn't exist, 'pataphysics has popped up with happy regularity for decades — ever since playwright and exquisite jokester Alfred Jarry conceived of the proto-Dadaist 'science of imaginary solutions'. Andrew Hugill, a professor of digital humanities, has spent 25 years charting 'pataphysics in science and the arts. He teases out its influence on everything from the philosophy of Jean Baudrillard to the novels of Philip K. Dick — and suggests that Jarry may have pre-empted theories of antimatter.