



Jobs blues

BOTS BIGGER FOE THAN CHINA

Donald Trump blames Mexico and China for stealing millions of jobs from the United States. He might want to bash the robots instead ■ X3



- MOVIES: THE EAGLE HUNTRESS
- BOOKS: THANKS FOR THE MONEY BY JOEL McHALE
- MUSIC: BURN SOMETHING BEAUTIFUL BY ALEJANDRO ESCOVEDO
- WINE: THE QUINTESSENCE OF PURITY
- FOOD & BEVERAGE: RAO'S COOKBOOK SERVES UP SPICY ANECDOTES WITH THE MEATBALLS

DRIVE IN

Lindsey Bahr, AP Film Writer

'THE EAGLE HUNTRESS' IS A HEARTWARMING ALL-AGES TALE

There is an ancient tradition of falconry practiced by the people of Mongolia where burkitshi, or "eagle hunters," train golden eagles to respond to their call and hunt hares and foxes in the frozen landscape. It's a skill and ceremonial practice that's learned from age 13 and has been largely the domain of men. Enter Aisholpan, a 13-year-old nomadic Kazakh girl who wants to be an eagle hunter. Her father is one. Her grandfather was too. And it's a family tradition that dates back 12 generations. It's this shy, rosy cheeked and brave little girl whose story to become the first female eagle hunter in her family is lovingly told in the documentary "The Eagle Huntress," which is sure to inspire and enchant

generations of young children with its heartwarming story and stunning locations. It's fitting that the film is narrated (and executive produced) by Daisy Ridley, who shepherded the "Star Wars" universe into a more empowering space for women with her portrayal of the ambitious and self-sufficient Jedi-in-training Rey. Director Otto Bell embeds the audience in Aisholpan's world, which looks both modern and ancient at the same time. She lives with her parents and siblings in a spacious yurt. Her mother cooks and cleans and her father herds goats and cattle across the Mongolian Steppe. Aisholpan helps out with the chores at home and is a top student who hopes one day to become a doctor.

But first, she wants to follow in her father's footsteps and train eagles. There is an obvious girl power message in the film that's spelled out loud and clear by both the narration and the framing of Aisholpan's accomplishments. Although her father and mother support her dreams, Bell makes sure to show a room of elder eagle hunters expressing doubts about a woman's ability to perform the job because they lack the necessary bravery and are "too fragile." They might as well be twirling their mustaches for how on the nose it all is. In fact, there's an overriding level of artifice to "The Eagle Huntress" that's hard to shake. Bell opts for reality show techniques to up the drama throughout, like a cut



Aisholpan (left) and her father Nurgav in a scene from "The Eagle Huntress"

of Aisholpan removing her hat at a competition to reveal she's a girl juxtaposed with a shot of a man looking aghast while the music crescendos. Was he really looking at her?

Was it an authentic moment? As it plays out, it certainly doesn't feel real even if the spirit of truth is there. It's something that's unlikely to bother or even register

with younger audiences and perhaps it's even a necessary storytelling device. But it does break the spell of this otherwise enchanting and quite sincere film.

It's hard not to get swept up in Aisholpan's bravery and determination as she climbs down a rocky terrain to kidnap her very own eagle, or as she braces for impact when her eagle swoops down to land on her arm. The drone shots of the landscapes, too, are something to behold. It is indeed a rare and special story, and, as a film, it's a wholesome lark that you'll want to show your daughters and sons.

"The Eagle Huntress," a Sony Pictures Classic release, is rated G by the Motion Picture Association of America. Running time: 87 minutes. ★★☆☆



BOOK IT

McHALE CELEBRATES HIS TALENTS IN 'THANKS FOR THE MONEY'



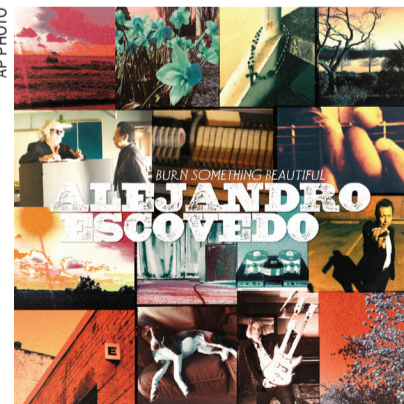
"Thanks For the Money" (G.P. Putnam's Sons), by Joel McHale

When thinking of Joel McHale, some may immediately conjure images of the actor in the cult classic "Community." Others may know him as the host who provided enough sarcasm to fill a room in the pop culture talk show "The Soup." In "Thanks For the Money," McHale is quick to point out that how you know about him is irrelevant — as long as you admit his luscious locks are indeed not a hairpiece. He invites readers to use his experience as a somewhat famous person to be the best household name they can be. He writes about how famous people diet and explains the task of choosing a celebrity feud that's right for you. The book also delves into the details of his day-to-day life, answering questions such as: What would it be like to challenge Chevy Chase in a fight? And how many head injuries can a person sustain before being hospitalized? McHale manages to take everyday scenarios and twist them into witty and oddly relatable life lessons. The book is smart, honest and clever.

Lincee Ray, AP

TTUNES

ALEJANDRO ESCOVEDO ROCKS OUT ON 'BURN'



Alejandro Escovedo, "Burn Something Beautiful" (Fantasy Records)

Alejandro Escovedo may not be a household name, but he should be. The 65-year-old singer-songwriter emerged in the 1970s as a punk rocker, gained acclaim as a soulful Texas-based alt-country star and has been holding down the roots rock mantle for years. The styles all co-exist wonderfully on his new release "Burn Something Beautiful," his first in four years. Escovedo co-wrote the 13 songs and produced it with former R.E.M. member Peter Buck and Scott McCaughey of The Minus 5. The record comes as Escovedo has battled hepatitis-C and survived a hurricane while on his honeymoon in Mexico. That experience left him with post-traumatic stress disorder. So maybe it's no surprise on "Burn Something Beautiful" he sings of loss, the healing power of love and his own mortality.

But it's no maudlin affair. Guitars wail on the opener, "Horizontal," setting the tone for what's to come. He may be 65, but Escovedo seems determined to prove advancing age isn't an inhibitor to showing the youngsters how to rock. Still, musings on the inevitable end are never far away, like on "I Don't Want to Play Guitar Anymore." "When there's no stories left to sing," Escovedo sings, "say goodbye to everything."

Scott Bauer, AP

NEWS OF THE WORLD

Paul Wiseman, AP Economics Writer

Why robots, not trade, are behind so many factory job losses

Here's a thought despite the Republican presidential nominee's charge that "we don't make anything anymore," manufacturing is still flourishing in America. Problem is, factories don't need as many people as they used to because machines now do so much of the work.

America has lost more than 7 million factory jobs since manufacturing employment peaked in 1979. Yet American factory production, minus raw materials and some other costs, more than doubled over the same span to USD1.91 trillion last year, according to the Commerce Department, which uses 2009 dollars to adjust for inflation. That's a notch below the record set on the eve of the Great Recession in 2007. And it makes U.S. manufacturers No. 2 in the world behind China.

Trump and other critics are right that trade has claimed some American factory jobs, especially after China joined the World Trade Organization in 2001 and gained easier access to the U.S. market. And industries that have relied heavily on labor — like textile and furniture manufacturing — have lost jobs and production to low-wage foreign competition. U.S. textile production, for instance, is down 46 percent since 2000. And over that time, the textile industry has shed 366,000, or 62 percent, of its jobs in the United States.

But research shows that the automation of U.S. factories is a much bigger factor than foreign trade in the loss of factory jobs. A study at Ball State University's Center for Business and Economic Research last year found that trade accounted for just 13 percent of America's lost factory jobs. The vast majority of the lost jobs — 88 percent — were taken by robots and other homegrown factors that reduce factories' need for human labor.



A worker moves a tube to sort recycled plastic bottle chips being processed at the Repreve Bottle Processing Center

"We're making more with fewer people," says Howard Shatz, a senior economist at the Rand Corp. think tank.

General Motors, for instance, now employs barely a third of the 600,000 workers it had in the 1970s. Yet it churns out more cars and trucks than ever.

Or look at production of steel and other primary metals. Since 1997, the United States has lost 265,000 jobs in the production of primary metals — a 42 percent plunge — at a time when such production in the U.S. has surged 38 percent.

Allan Collard-Wexler of Duke University and Jan De Loecker of Princeton University found last year that America didn't lose most steel jobs to foreign competition or faltering sales. Steel jobs vanished because of the rise of a new technology: Super-efficient mini-mills that make steel largely from scrap metal.

The robot revolution is just beginning. The Boston Consulting Group predicts that investment in industrial robots will grow 10 percent a year in the 25-biggest export nations through 2025, up from 2 or 3 percent growth in recent years.

The economics of robotics are hard to argue with. When products are replaced or updated, robots can be reprogrammed far faster and more easily than people can be retrained. And the costs are dropping: Owning and operating a robotic spot welder cost an average \$182,000 in 2005 and \$133,000 in 2014 and will likely run \$103,000 by 2025, Boston Consulting says. Robots will shrink labor costs 22 percent in the United States, 25 percent in Japan and 33 percent in South Korea, the firm estimates. CEO Ronald De Feo is overseeing a turnaround at Kennametal, a Pi-

ttsburgh-based industrial materials company. The effort includes investing \$200 million to \$300 million to modernize Kennametal's factories while cutting 1,000 of 12,000 jobs. Automation is claiming some of those jobs and will claim more in the future, De Feo says.

"What we want to do is automate and let attrition" reduce the workforce, he says.

Visiting a Kennametal plant in Germany, De Feo found workers packing items by hand. He ordered \$10 million in machinery to automate the process in Germany and North America.

That move, he says, will produce "better quality at lower cost" and "likely result in a combination of job cuts and reassignments."

But the rise of the machines offers an upside to some American workers: The increased use of robots — combined with higher labor

costs in China and other developing countries — has reduced the incentive for companies to chase low-wage labor around the world.

Multinational companies are also rethinking how they spread production across the globe in the 1990s and 2000s, when they tended to manufacture components in different countries and then assemble a product at a plant in China or other low-wage country. The 2011 earthquake and tsunami in Japan, which disrupted shipments of auto parts, and the bankruptcy of the South Korean shipping line Hanjin Shipping, which stranded cargo in ports, exposed the risk of relying on far-flung supply lines.

"If your supply chain gets interrupted and your raw materials are coming from offshore, all of a sudden shelves are empty and you can't sell product," says Thomas Caudle, president of the North Carolina-based textile company Unifi.

So companies have been returning to the United States, capitalizing on the savings provided by robots, cheap energy and the chance to be closer to customers.

"They don't have all their eggs in that Asian basket anymore," Caudle says.

Over the past six years, Unifi has added about 200 jobs, bringing the total to over 1,100, at its automated factory in Yadkinville, North Carolina, where recycled plastic bottles are converted into Repreve yarn. Unmanned carts crisscross the factory floor, retrieving packages of yarn with mechanical arms — work once done by people.

In a survey by the consulting firm Deloitte, global manufacturing executives predicted that that the United States — now No. 2 — will overtake China as the most competitive country in manufacturing by 2020. (Competitiveness is measured by such factors as costs, productivity and the protection of intellectual property.)

The Reshoring Initiative, a nonprofit that lobbies manufacturers to return jobs to the United States, says America was losing an average of 220,000 net jobs a year to other countries a decade ago. Now, the number being moved abroad is roughly offset by the number that are coming back or being created by foreign investment.

Harold Sirkin, senior partner at Boston Consulting, says the global scramble by companies for cheap labor is ending.

"When I hear that [foreigners] are taking all our jobs — the answer is, they're not," he says.



A worker loads spools of thread



Recycled plastic chips are packed into bags for delivery

WORLD OF BACCHUS

Jacky I.F. Cheong



WILLI SCHAEFER GRAACHER HIMMELREICH RIESLING KABINETT VDP GROSSE LAGE 2013

Translucent citrine with pastel golden reflex, the cordial nose offers bergamot, green apple, wet stone and paperwhite. With lively acidity and pure minerality, the adorable palate delivers calamansi, Japanese pear, crushed shells and lemon blossom. Off-dry and medium-bodied at 7.5%, the dainty entry carries onto a focused mid-palate, leading to a refreshing finish.



WILLI SCHAEFER GRAACHER DOMPROBST RIESLING SPÄTLESE VDP GROSSE LAGE 2012

Limpid citrine with bright golden reflex, the floral nose presents peach, pineapple, wet stone and frangipani. With vivacious acidity and stony minerality, the attractive palate supplies Fuji apple, apricot, crushed rock and daffodil. Off-sweet and medium-bodied at 7.5%, the peachy entry continues through a succulent mid-palate, leading to a tangy finish.



WILLI SCHAEFER GRAACHER HIMMELREICH RIESLING AUSLESE VDP GROSSE LAGE 2013

Luminous citrine with light chartreuse hues, the alluring nose furnishes kumquat, longan, lemon curd, crushed rock and white tulip. With sprightly acidity and pristine minerality, the seductive palate provides yuzu, mangosteen, tangerine marmelade, seashells and white rose. Fully sweet and medium-full bodied at 7%, the enchanting entry persists through a melodious mid-palate, leading to a delightful finish.



WILLI SCHAEFER GRAACHER DOMPROBST RIESLING BEERENAUSLESE VDP GROSSE LAGE 2010

Radiant golden with bright amber reflex, the intricate nose effuses Seville orange, apricot, dried longan, crystallised tangerine peel, white clover honey and osmanthus. With animated acidity and crystalline minerality, the chiselled palate emanates clementine, nectarine, dried mango, orange marmelade, lemon honey and honeysuckle. Luxuriously sweet and full-bodied at 8%, the lush entry evolves into a symphonic mid-palate, leading to a lingering finish.

The Quintessence of Purity

Mosel is the name of both the river – a tributary of the Rhine running parallel to Ahr – and the wine region, one of Germany's largest, most important and prestigious. Stretching from Trier – purportedly the oldest city of Germany and the birthplace of Karl Marx – to Koblenz, the meandering river with sharp turns and hairpin bends travels some 250km, or 125km as the crow flies. This is one of the most inimitable wine regions on earth, whose wines are instantaneously distinguishable. Viticulture and winemaking in Mosel can be traced back to the early 1st century BC, when the Roman city of Augusta Treverorum, now Trier, was founded. Since the Middle Ages, Riesling has reigned supreme in this region, now comprising approximately 60% of all vines planted. If Riesling is a daredevil which enjoys living on the sharp edge of a knife, in Mosel it has found its natural habitat. The southernmost of German wine regions is on a par with cool-climate regions such as Bourgogne and Champagne, yet Mosel is significantly more northerly. In an area where other cosy varieties would not reach maturity, Riesling flourishes thanks to the delicate balance in which the Mosel reflects just enough sunshine and the steep slopes allow just enough exposure, while the slate-dominated soil retains just enough warmth. Renowned for its breathtaking landscape, Mosel is home to some of the steepest vineyards in the world, some reaching a staggering 65 degrees gradient. Few crops

can grow under such circumstances, and yet this is the source of some of the greatest white wines on earth. So labour-intensive is viticulture in Mosel that it is often said that it requires seven times the manpower as do flat vineyards. Despite the labour cost, Mosel wines remain, at least for now, tantalisingly affordable. Willi Schaefer is the quintessential quality-driven family-owned estate in Mosel. With a venerable family history dating back to 1121, it has but 4.2ha of prime vineyards, some of which comprising ungrafted vines up to 100 years old, including Wehlener Sonnenuhr ("Wehlen's sundial"), Graacher Domprobst ("Graach's cathedral provost") and Graacher Himmelreich ("Graach's heaven kingdom"). Hovering between 6% and 9% ABV, its exquisite produce is immensely fruity with pristine – not the saline type – minerality and slight petillance in youth. Much of Riesling, especially Mosel's Riesling, is consumed too young despite its substantial ageing potential, but who could blame the thirsty drinkers, when the wines are so irresistible in youth? If there are 10 regions whose wines one must taste before returning to the Creator – or Karl Marx, if you are a communist – Mosel is surely one of them.

To explore the finest of Mosel, contact Ms Guiomar Pedruco of Macau Fine Wine Bazaar Co. Ltd.; W: www.macaubazaar.com.mo; E: guiomar@macaubazaar.com.mo; T: +853 2872 0025

Jacky I.F. Cheong is a legal professional by day and columnist by night. Having spent his formative years in Britain, France, and Germany, he regularly writes about wine, fine arts, classical music, and politics in several languages

RESTAURANTS

CANTONESE



GRAND IMPERIAL COURT
5pm - 12midnight
T: 8802 2539
Level 2, MGM MACAU



IMPERIAL COURT
Monday - Friday
11am - 3pm / 6pm - 11pm
Saturday, Sunday & Public Holidays
10am - 3pm / 3pm - 11pm
T: 8802 2361
VIP Hotel Lobby, MGM MACAU

BEIJING KITCHEN
Level 1, Grand Hyatt Macau
Opening Hours
11:30am - 24:00



KAM LAI HEEN
Grand Lapa, Macau
956-1110 Avenida da Amizade, 2/F
T: 8793 3821
11:00 - 15:00 / 18:00 - 22:00
(Close on Tuesday)

SHANGHAI MIN
Level 1, The Shops at The Boulevard
Opening Hours
11:00 - 15:00; 18:00 - 22:30

SHANGHAI

CATALPA GARDEN
Mon - Sunday
11:00 - 15:00 / 17:30 - 23:00
Hotel Royal, 2-4
Estrada da Vitoria
T: 28552222

FRENCH

寶雅座
AUX BEAUX ARTS

AUX BEAUX ARTS
Monday - Friday
6pm - 12midnight
Saturday - Sunday
11am - 12midnight
T: 8802 2319
Grande Praça, MGM MACAU

GLOBAL

HARD ROCK CAFE
Level 2, Hard Rock Hotel
Opening Hours
Monday to Sunday : 11:00 - 02:00
Sunday : 10:00 - 02:00

CAFÉ BELA VISTA
Grand Lapa, Macau
956-1110 Avenida da Amizade, 2/F
T: 87933871
Mon - Thurs
06:30 - 15:00 / 6:00 - 22:00
Fri - Sunday
06:30 - 22:00

MEZZA9 MACAU
Level 3, Grand Hyatt Macau
Opening Hours
Dinner: 5:30 - 11:00



VIDA RICA (RESTAURANT)
2/F, Avenida Dr Sun Yat Sen, NAPE
T: 8805 8918
Mon - Sunday
6:30 - 14:30 / 18:00 - 23:00



MORTON'S OF CHICAGO
The Venetian(r) Macao-Resort-Hotel
Taipa, Macau
T:853 8117 5000
mortons.com
• Bar
Open daily at 3pm
• Dining Room
Monday - Saturday: 13:00 - 23:00
Sunday: 17:00 - 22:00

ABA BAR

ABA BAR
5pm - 12midnight
T: 8802 2319
Grande Praça, MGM MACAU



PASTRY BAR
10am - 8pm
T: 8802 2324
Level 1, MGM MACAU



ROSSIO
7am - 11pm
T: 8802 2372
Grande Praça, MGM MACAU



SQUARE EIGHT
24 hours
T: 8802 2389
Level 1, MGM MACAU

ITALIAN

LA GONDOLA
Mon - Sunday
11:00am - 11:00pm
Praia de Cheoc Van, Coloane,
next to swimming pool
T: 2888 0156



PORTOFINO
Casino Level1, Shop 1039,
The Venetian Macao
TEL: +853 8118 9950



AFRIKANA
Monday to Sunday
6:00pm - 3:00am
Location : AfriKana, Macau Fisherman's Wharf
Telephone Number : (853) 8299 3678

JAPANESE

SHINJI BY KANESAKA
Level 1, Crown Towers
Lunch 12:00 - 15:00
Dinner 18:00 - 23:00
Closed on
Tuesday (Lunch and Dinner)
Wednesday (Lunch)

ASIAN PACIFIC

ASIA KITCHEN
Level 2, SOHO at City of Dreams
Opening Hours
11:00 - 23:00

GOLDEN PAVILION
Level 1, Casino at City of Dreams
Opening Hours
24 Hours



GOLDEN PEACOCK
Casino Level1, Shop 1037,
The Venetian Macao
TEL: +853 8118 9696
Monday - Sunday:
11:00 - 23:00

PORTUGUESE

CLUBE MILITAR
975 Avenida da Praia Grande
T: 2871 4000
12:30 - 15:00 / 19:00 - 23:00

FERNANDO'S
9 Praia de Hac Sa, Coloane
T: 2888 2264
12:00 - 21:30

THAI



NAAM
Grand Lapa, Macau
956-1110 Avenida da Amizade, The Resort
T: 8793 4818
12:00 - 14:30 / 18:30 - 22:30
(Close on Mondays)

BARS & PUBS



38 LOUNGE
Altrira Macau,
Avenida de Kwong Tung, 38/F Taipa
Sun-Thu: 13:00 - 02:00
Fri, Sat and Eve of public holiday:
15:00 - 03:00

R BAR
Level 1, Hard Rock Hotel
Opening Hours
Sun to Thu:
11:00 - 23:00
Fri & Sat:
11:00 - 24:00



BELLINI LOUNGE
Casino Level 1, Shop 1041,
The Venetian Macao
CONTACT US:
Tel: +853 8118 9940
Daily: 16:00 - 04:00



D2
Macau Fisherman's Wharf
Edf. New Orleans III
Macau

VIDA RICA BAR
2/F, Avenida Dr. Sun Yat Sen, NAPE
T: 8805 8928
Monday to Thursday: 12:00 - 00:00
Friday: 12:00 - 01:00
Saturday: 14:00 - 01:00
Sunday: 14:00 - 00:00

VASCO
Grand Lapa, Macau
956-1110 Avenida da Amizade, 2/F
T: 8793 3831
Monday to Thursday: 18:30 - 12:00
Friday to Saturday: 18:00 - 02:00
Sunday: 18:00 - 24:00

FOOD & BEVERAGE

Jocelyn Noveck, AP

AP PHOTO



The exterior of Rao's restaurant in the Harlem section of New York

RAO'S COOKBOOK SERVES UP SPICY ANECDOTES WITH THE MEATBALLS

So one night, the story goes, Justin Bieber was in town (NYC), and had a hankering for Italian food. Not just any Italian, but Rao's, the tiny restaurant by a park in East Harlem that's been around for 120 years — and is one of the hardest-to-get tables in the country, let alone the city. Some "serious society types" made inquiries for Bieber, according to an anecdote in the new cookbook, "Rao's Classics." But the place was booked with regulars, as always. Would heaven and earth be moved? The answer came crisply and succinctly: "No one gives a [blank] about Justin Bieber."

Many things are said to be impossible in Manhattan. A taxi at rush hour in the rain. A parking spot on a Saturday night. "Hamilton" tickets in the current century.

But let's be precise. Those things are difficult, but not impossible. You know what's impossible? Getting a reservation at Rao's.

The first thing to know is that Rao's has only 10 tables, serving 60-ish diners a night — one leisurely seating only (and no lunch). The next is that these tables have been assigned for years. People have their regular nights. A table can be handed down in a family, or gifted to a friend for a night,

or auctioned for charity at many (many!) thousands of dollars for an evening.

As the Zagat guide says, it "practically takes an act of Congress" to score a table.

And so, visiting Rao's one day recently, some five hours before doors open, one of our first questions is whether there's ever been a thought to shaking up the system — maybe getting a bunch of fresh blood into the doors. That, says co-owner Frank Pellegrino Jr., is really missing the point.

"I've known many of these guests since I was a kid," says

Pellegrino, 46, whose first job at Rao's was a summer gig in 6th grade. "There's a bond. It's about preservation of relationships."

If you really want a table at Rao's, probably the best place to try is in Vegas, where the 10-year-old Rao's at Caesar's Palace occupies 10,000 square feet — "about five New York Rao's in one," quips Pellegrino — serving 400-600 people a night (and 800 large meatballs a day). There's also been an outpost in Hollywood since 2013.

Pellegrino Jr. spends most of his time out west, while his father, Frank Sr., presides over the Manhattan locale, which opened in 1896. Coming back to New York feels like a reunion, he says. Still, "I only get to eat here when I'm working or when I cook myself" — which is what he's doing

at 1 p.m. when we arrive.

The place is quiet, very quiet. Lights are still off in the dining room. But in the kitchen, a huge pot of marinara sauce is being tended by Paulie Sanchez, who's been with the restaurant some 15 years. Pellegrino, meanwhile, is whipping up some fusilli with cabbage and sausage. The recipe appears in the new book, with about 140 other favorites.

On a tiny shelf — there's not much wall space — sits a jar of the famous Rao's sauce sold in stores by the restaurant's specialty food business. That business — and the handling of it — is currently the subject of a lawsuit in state court that has, according to tabloid reports, caused a bitter rift between Pellegrino Sr. and his cousin and co-owner, Ron Straci, and his wife Sharon. Pellegrino Jr. will only say that the lawsuit is ongoing but he's hopeful it will be resolved soon. But it's hard to say the lawsuit is the most dramatic calamity to befall the restaurant — not with the murder and all.

It happened, as the book recounts (authors are the two Pellegrinos and Joseph Riccobene), around Christmas 2003, when a young actress was serenading diners with "Don't Rain On My Parade." A man at the bar "uttered unkind words." An older man, a mobster nicknamed "Louie Lump Lump," admonished him, more insults were traded, and Louie ended up pulling a gun and killing the younger man.

It didn't hurt business.

"I was here that evening," says Pellegrino Jr. "It was a very unfortunate incident — we always viewed Rao's more like Switzerland than anything else." He adds that rumor has it there was an earlier shooting "back in 1911 or 1912. A woman sitting here at the bar, a stray bullet from outside. I can't confirm it."

But back to the food. Pellegrino's favorite dishes include the pork chop with cherry peppers — a 450-year-old recipe — and the shells with ricotta. The seafood salad is very popular. But probably the one thing Rao's is best known for is its meatball — about three times the size of a normal one. Initially, meatballs were served only on Wednesdays. But demand was too great to limit the dish.

Rao's walls are plastered with photos of the celebrities that have passed through — usually as guests of regulars. Hillary Clinton's picture is there, from her Senate years; Donald Trump has also visited. Hollywood stars galore. And many cast members of "The Sopranos."

One regular was sportswriter Dick Schaap, who died in 2001. At his funeral, Billy Crystal noted in his eulogy that everyone was thinking the same thought. "Who's going to get his table at Rao's?"



Frank Pellegrino Jr. co-owner of Rao's, prepares fusilli with cabbage and sausage as a pot of his signature sauce bubbles on the stove



Frank Pellegrino Jr. co-owner of Rao's, serves meatballs to accompany fusilli with cabbage and sausage

WHAT'S ON



TODAY (NOV 4)

CARMEN
BY NATIONAL DANCE COMPANY OF SPAIN

In a streak of passion and choreographic novelty, National Dance Company of Spain (CND) revisits Macau with Carmen, a dance adaptation of Bizet's operatic masterpiece. Created by Swedish choreographer Johan Inger, this portentous performance offers dance and music lovers a pure, uncontaminated view of a classic. Blending the original score with additional contemporary music, Inger constructed the action seen through the innocent eyes of a young boy.

TIME: 8pm
VENUE: Macao Cultural Centre,
Avenida Xian Xing Hai s/n, Nape
ADMISSION: MOP150, MOP200, MOP250, MOP300
ORGANIZER: Macao Cultural Centre
ENQUIRIES: (853) 2870 0699
<http://www.ccm.gov.mo>
TICKETING ENQUIRIES: (853) 2855 5555
<http://www.macaoticket.com>



TOMORROW (NOV 5)

THE DUAL FACES OF RUSSIA

The first chamber music concert of this season brings two masterpieces from Russian composers, demonstrating the flamboyant notes and heroic passion of Russian ethnic culture. Prokofiev's dynamic quintet and Borodin's unadorned and affectionate string quartet No. 2 exemplify two extremes of Russian music.

TIME: 8pm
VENUE: Dom Pedro V Theatre
ORGANIZER: Macao Chinese Orchestra
ENQUIRIES: (853) 8399 6699
<http://www.icm.gov.mo/ochm>



LION DANCE & CHINESE MARTIAL ARTS

The ideal environment in which to watch a lion dance and Chinese martial arts performance, Hong Kung Temple still welcomes public worship of the Immortal Chief General Hong Kung, the Great King Hung Shing, the Money King Wukong, the Sixth and Last Patriarch of Chan Buddhism and Hua Tuo, eminent physician of the Hang Dynasty. See the experts at work in the Lion Dance and Chinese Martial Arts Performance with origins, etiquette and taboos all explained.

TIME: 8:30pm-9:30 pm
DATE: November 5 & 19
ADMISSION: Free
VENUE: Hong Kung Temple Square,
Rua de Cinco de Outubro
ENQUIRIES: (853) 2825 9897
ORGANIZER: The Industry and Commerce
Federation of Macao Central and Southern District,
Macao Federation of Trade Unions (Sport Council)



SUNDAY (NOV 6)
47TH CARITAS MACAO CHARITY BAZAAR

The Caritas Macao Charity Bazaar is a major annual fundraising event now in its 47th year, which this year is themed 'Build up character to nurture spirit. Gather inspiration for a meaningful life.' Designed to support social services expenses, the Bazaar annually attracts thousands to its 80 booths of assorted games, specialty cuisine and charity sale attractions. Local broadcaster TDM and various groups provide entertaining stage performances - to which all are welcome - and you can win fantastic prizes by picking up raffle tickets that make all the difference!

TIME: 2pm-11pm (November 5)
11:30am-10pm (November 6)
VENUE: Nam Van Lake Nautical Centre
ADMISSION: Free
ENQUIRIES: (853) 2857 3297
ORGANIZER: Caritas Macao
<http://www.caritas.org.mo/zh-hant/sites/47-bazaar>

MONDAY (NOV 7)

LITTLE RABBIT LANTERNS, AN EXHIBITION BY CARLOS MARREIROS AND FRIENDS - PART 11

Little Rabbit Lanterns, an Exhibition by Carlos Marreiros and Friends - Part 11 salutes the origins

of Chinese lanterns, which date back to the Han Dynasty 1,800 years ago. Organized by Albergue SCM every year since 2009, Part 11 features a collection of around 30 creative lanterns designed by artists from Macau and beyond inspired by the traditional rabbit lantern. The patio outside the gallery is also decorated with these beautiful pieces of art, creating a delightfully calm, artistic ambiance.



TIME: 3pm-8pm (Mondays); 12pm-8pm (Tuesdays to Sundays, opened on public holidays)
UNTIL: November 20, 2016
VENUE: Albergue SCM - A2 Gallery / Calçada da Igreja de São Lázaro No.8, Macau
ENQUIRIES: (853) 2852 2550
FACEBOOK PAGE: creativealbergue.scm
ADMISSION: Free
ORGANIZER: Albergue SCM



TUESDAY (NOV 8)
CHINESE AND PORTUGUESE ART FEAST

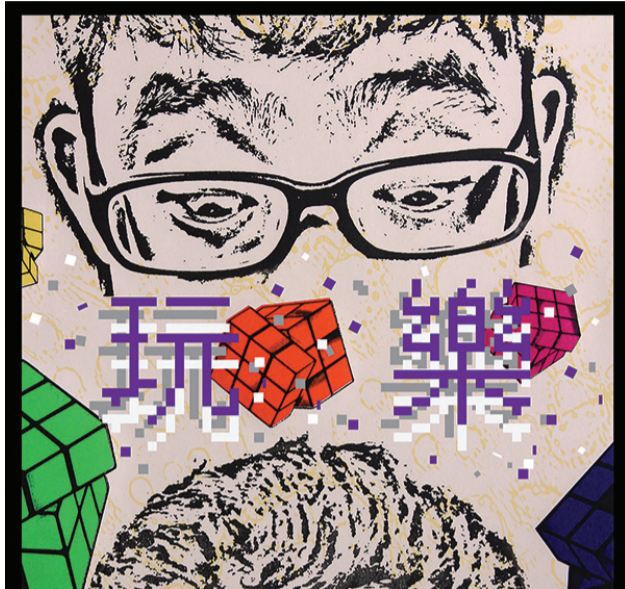
In a celebration of the centuries-old links between these two distinct cultures, the 8th Cultural Week of China and Portugal includes Portugal dishes, dramas, outdoor performances, the Handicraft & Art Fair and exhibitions. This year, there are performers, artists, chefs from local, mainland China, and nine Portuguese-speaking countries to enrich the cultural week! Don't miss out on the various art exhibitions hosted by several venues!

EXHIBITION ON THE ARTWORK OF PORTUGAL ARTIST - JORGE MARTINS,
EXHIBITION ON THE ARTWORK OF EAST TIMOR ARTIST - ALFEO SANCHES
TIME: 10am-7:00pm (Closed on Mondays)
VENUE: Taipa Houses-Museum, Avenida da Praia

EXHIBITION ON THE ARTWORK OF MACAO ARTIST - CÉLIA DO ROSÁRIO
TIME: 11am-5pm
VENUE: the residence of the Consul-General of Portugal in the Macao SAR, Rua do Comendador Kou Hó Neng (the former Hotel Bela Vista)

DATE: October 24 to November 13, 2016
ENQUIRIES: (853) 8791 3368
ORGANIZER: Permanent Secretariat of Forum for Economic and Trade Co-operation between China and Portuguese-speaking Countries (Forum Macao)

ADMISSION: Free to all activities
<http://www.forumchinapl.org.mo>



WEDNESDAY (NOV 9)
10 FANTASIA - EXHIBITIONS

'Have Fun' Chu Kin Fat Artwork Exhibition (Until: November 13) features ten of his blue print and screen printing artworks via which the artist seeks to rekindle childhood memories through the medium of toys, thus encouraging exhibition-goers to cherish what we have now. 'Summer x Metal' Sculpture Exhibition (Until: November 12) displays the works of six local artists, featuring different styles and presented in different forms calculated to get Macau locals and artists to consider the power and momentum of diverse kinds of art.

TIME: 10:30am-6:30pm
(Closed on Mondays and public holidays)
ADMISSION: Free
VENUE: 10 Fantasia, Calçada da Igreja de S.Lazaro
ENQUIRIES: (853) 2835 4582
ORGANIZER: 10 Fantasia
<http://www.10fantasia.com>



THURSDAY (NOV 10)
AFA AUTUMN SALON,
VAFA INTERNATIONAL VIDEO FESTIVAL

AFA Autumn Salon 2016 and VAFA International Video Festival features 67 artworks by 32 local Macau artists including superb oil paintings, watercolours, drawings, sculptures, photography, porcelain and printmaking – plus videos. All participants are now working and living in Macao with many playing a central role in the Macau contemporary art scene.

TIME: 10am-7pm
(Closed on Mondays and public holidays)
VENUE: Orient Foundation, Casa Garden
DATE: November 5-30, 2016
ADMISSION: Free
ORGANIZER: Art For All Society
ENQUIRIES: (853) 2836 6064
<http://www.afaMacao.com>

Sands WEEKEND



THRILLER LIVE
Until 13 November
The Parisian Theatre

THRILLER LIVE is a stunning 90-minute theatrical concert to commemorate arguably the world's greatest ever entertainer, Michael Jackson. This high-energy explosion of pop, rock, soul and disco takes the audience on a magical audio-visual journey through Jackson's astonishing 45-year musical legacy. We challenge you to stay in your seat! Thriller is the debut show of The Parisian Theatre.

Tickets: From MOP/HKD180, call reservations +853 2882 8818
cotaiticketing.com



JIN AKANISHI LIVE TOUR 2016 AUDIO FASHION
8pm, 5 November (Saturday)
Cotai Arena

Singer-songwriter, actor, television personality and heartthrob Jin Akanishi has begun his career as lead vocalist in the popular J-pop boy-band KAT-TUN. As a solo artist he has released three studio albums – "Japonicana", "#JustJin" and most recently "Audio Fashion". As a part of duo JINTAKA, with actor and singer Takayuki Yamada, he recently released a music video for the track "Choo Choo Shitain", Japanese slang for "kiss". In April he was awarded the title of "Asia's Most Popular Japanese Artist" at the 20th China Music Awards which took place at The Venetian Macao.

Tickets: From MOP/HKD480, call reservations +853 2882 8818
cotaiticketing.com



A REWARDS SEASON
10am to 11pm, Daily, Until 30 November

Renew your wardrobe with endless Fall Winter shopping possibilities! Sands Shoppes offers the most extensive range of luxury duty-free shopping experiences and worldwide cuisines in Macao. Simply spend at Shoppes at Four Seasons, Shoppes at Venetian, Shoppes at Parisian and Shoppes at Cotai Central to earn up to MOP2,000 worth of Shopping Vouchers to be used in over 300 participating outlets. Sands Rewards members can enjoy a host of privileged discounts as well as earn and redeem points in partner outlets. So join today and experience all the exclusive rewards available!

Spending	Earn Shopping Vouchers
MOP5,000	MOP200
MOP10,000	MOP400
MOP25,000	MOP1,000
MOP50,000	MOP2,000

Redemption Locations: Information Counter throughout Sands Shoppes

* Customers must present two same-day valid receipts issued by two different merchants (a maximum of one receipt from dining outlets will be accepted) with a minimum spending amount of MOP200 upon each receipt for redemption purpose.

Please refer to the Terms & Conditions for further details.



PO'S KUNG FU FEAST, CHARACTER BREAKFAST WITH THE DREAMWORKS ALL-STARS
Until 30 September 2017

Urumqi Ballroom, Level 4, Sands® Cotai Central

Live your dreams like Po from "Kung Fu Panda" and experience the ultimate breakfast feast with your favourite DreamWorks All-Stars. Get your camera ready to capture the memorable moments with your beloved DreamWorks heroes and enjoy the exclusive stage performances. Book now to experience the coolest themed breakfast!

Adult: MOP238+ Child: MOP138+
Family Package (4 Family Persons + 1 Child): MOP 688+
Saturday – Monday: 10am – 11:30am | Tuesday – Friday: 9am – 10:30am
Reservations: +853 8113 7915 / 8113 7916



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WORLD OF WONDER

Exploring the realms of history, science, nature and technology

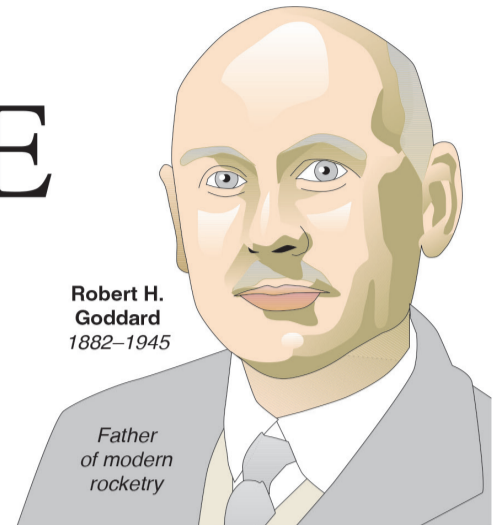
ROCKET SCIENCE

By Laurie Triefeldt



According to legend, around 1500, a Chinese official named **Wan Hu** tried to fly by lighting **47 rockets tied to a large wicker chair**. Not surprisingly, after the dust settled, there was no sign of the chair — or of Wan Hu.

In their simplest form, as fireworks, rockets have been around for centuries. The realm of rocket science has made most of its progress in just the past 100 years. Today, NASA, private companies and nations around the world are working on rockets that will take people and cargo into space more quickly and affordably.



Robert H. Goddard
1882–1945

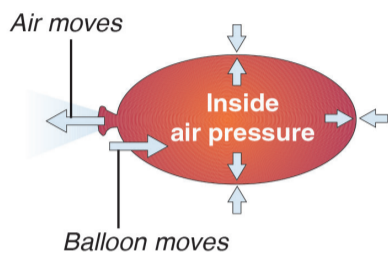
Father of modern rocketry

What is a rocket?

A rocket is a device that uses the force of **ejected matter to propel** (drive forward) an object.

For example, when a balloon is filled with air and released, the balloon is thrust forward as the air is ejected. This action (air leaving the balloon) and the reaction (the balloon moving) demonstrate Newton's law that for every action, there is an equal and opposite reaction. Rockets work in the same way as a released balloon.

Rocket engines are used to carry scientific instruments into the atmosphere or into outer space for research. They are also used as weapons to carry explosives to a target, and they can launch satellites or spaceships. Fireworks are also a kind of rocket. For their size, rockets produce more power than any other engine.



Sir Isaac Newton
1642-1727

Blast off!

Modern rockets burn fuel to produce energy for liftoff. They are sometimes referred to as **chemical rockets** because burning is a chemical reaction. Chemical rockets burn huge amounts of fuel very fast and at very high temperatures.

Rockets burn fuel in a combustion (burning) chamber, which results in rapidly expanding gas. This pressurized gas is released through a nozzle at the back of the chamber. Engineers discovered that the smaller the throat of the exit, the more the gases accelerate, providing extra thrust. A cone-shaped nozzle further restricts the gases and accelerates them even more.

The exhaust of gas through the nozzle is the **action** described in Newton's law. The **reaction** is the thrust (pushing force) of the rocket away from the flow of exhaust gas.

Hero's engine

An early Greek engine (A.D. 62), called an **aeolipile** by its inventor, Hero of Alexandria, was one of the first devices to successfully use the principles of rocket flight. Hero's engine created steam that, when exiting through L-shaped pipes on either side, created thrust, causing the sphere to rotate.



Hero's aeolipile
an early steam engine

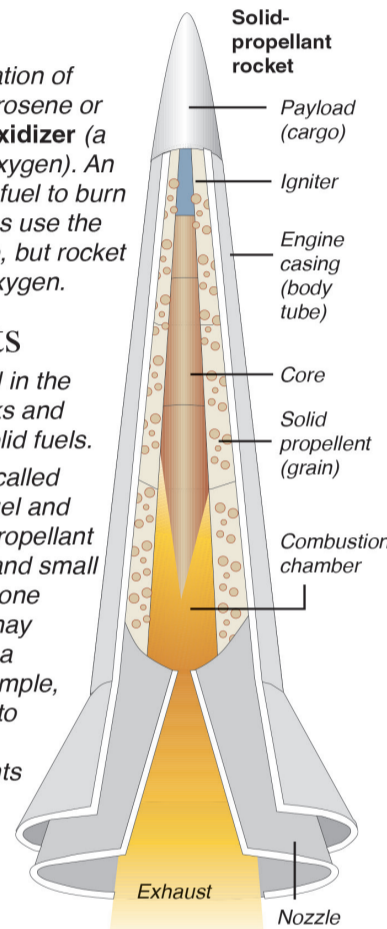
Propellants

A **propellant** is a combination of fuel (such as gasoline, kerosene or liquid hydrogen) and an **oxidizer** (a substance that supplies oxygen). An oxidizer is needed for the fuel to burn in outer space. Jet engines use the oxygen in the atmosphere, but rocket engines carry their own oxygen.

Solid propellants

Solid propellants are used in the simplest rockets. Fireworks and model rockets fly using solid fuels.

A dry, plasticlike material called the **grain** is made up of fuel and an oxidizer. This type of propellant requires **ignition**; a fuse and small charge of gunpowder are one ignition method. Ignition may also be achieved through a chemical reaction; for example, liquid chlorine sprayed onto the grain will ignite the propellant. Solid propellants burn faster than liquid propellants.



New ideas!

In 1919, **Robert H. Goddard** published a pamphlet with several theories about rocketry. His experiments with solid- and liquid-propellant rockets between 1909 and 1945 led to the development of powerful boosters for intercontinental missiles and spacecraft. Critics scoffed at Goddard's ideas, but many of his conclusions were later proved correct.

A weighty issue

Rockets large enough to carry vehicles into space have serious weight considerations. One way scientists have solved the problem of weight is by making rockets that have several **stages**. As each stage exhausts its fuel supply, the empty casing falls away. The remaining load is lighter and can pick up speed. When a rocket leaves the atmosphere and enters space, it no longer encounters air friction (drag) and therefore requires less thrust to move.

Heavy lift

Heavy-lift rockets are the most powerful type of rockets. NASA's Saturn V rocket was one of the most powerful heavy-lift launch vehicles to fly successfully. The SpaceX Falcon 9, a super-heavy-lift rocket, exploded at launch in September 2016.

The future

NASA is working on new nuclear-powered rockets that could dramatically cut the time it takes to travel through the solar system.

Laws of motion

In 1687, Sir Isaac Newton published the first volume of his "Philosophiæ Naturalis Principia Mathematica," a work generally referred to as the "Principia." In this, Newton describes **three laws** that govern the motion of all objects on Earth or in space:

1. Objects at rest will stay at rest and objects in motion in a straight line will stay in motion in a straight line unless acted upon by an outside force.
2. Force is equal to mass times acceleration.
3. For every action there is an equal and opposite reaction.

Liquid-propellant rocket

Payload (cargo)

Oxidizer tank

Liquid fuel tank

Pumps

Fin

Combustion chamber

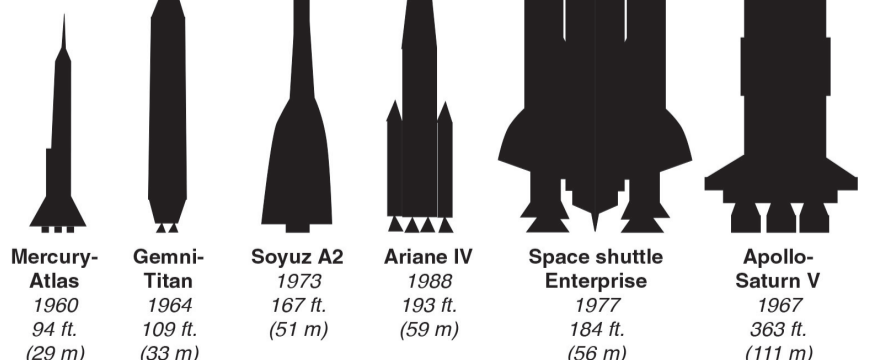
Nozzle

Exhaust

The space shuttles used both solid and liquid propellants.

Liquid propellants

Liquid propellants burn a mixture of fuel and oxidizer in liquid form — usually kerosene or hydrogen that has been cooled and turned into liquid. Liquid propellants require complicated engines. Separate fuel and oxidizer tanks are needed, along with a series of pumps, pipes and valves to mix the fuel and oxidizer into the combustion chamber. Most liquid propellants use an ignition system, but some, called **hypergols**, ignite when the fuel and oxidizer come into contact with each other. Liquid propellants can easily be turned on or off, allowing for superior thrust control. Liquid-propellant rockets are used for most space launch vehicles.



SOURCES: World Book Encyclopedia, World Book Inc.; <http://www.nasa.gov>; National Association of Rocketry

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