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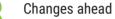




COVER IMAGE

In late September, Chief Executive Ho Iat Seng announced the resumption of e-permits for mainland tourists which is seen as a sign of gradual recovery of the tourism industry in Macao. Photo by Witaya Ratanasirikulchai

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POLITICS

Changes ahead

The Macao government has wrapped up its consultations with the public on national security law amendments. The proposed changes seek to safeguard Macao from non-traditional threats to national security and bolster development, according to high-ranking officials. Text Christian Ritter and Gonçalo César de Sá

Chief Executive Ho lat Seng addresses a crowd of more than 200 people on amending the national security law

The Macao government launched in August a 45-day public consultation on the draft of its national security law's amendment bill, which aims to ensure that Macao's legal system on the protection of national security will be as capable of safeguarding national security as the respective laws in the mainland and Hong Kong. The proposed amendments also aim to ensure that Macao's national security law will conform to the requirements outlined by Overall National Security Outlook, thereby making Macao more capable of

tackling non-traditional threats to national security.

In addition, the proposed amendments aim to strengthen the local government's ability to prevent external hostile forces from interfering in Macao affairs. During a public consultation session on the amendment bill for Macao's deputies to the National People's Congress (NPC), the local members of the National Committee of the Chinese People's Political Consultative Conference (CPPCC) and representatives from the political and legal sectors, Chief Executive Ho lat Seng pointed to four goals concerning the government's proposed amendments. The chief executive said that the proposed amendments to the

national security law, which are slated to be submitted to the Legislative Assembly are closely related to the nation's long-term stability and Macao's prosperity and stability.



Ho said that the current national security law, which was enacted back in 2009, based on Article 23 of the Macao Basic Law, needed to be amended because of major changes in the international and external security situation and also due to the severe security threats that the country is facing from various areas.

Ho pledged that his government will listen to views from all sectors of civil society and indicated that the aim of the consultation is to enable the government to respond more effectively to national security challenges.

In his speech, Ho declared that "Macao must be proactive in tackling all kinds of security risks. Macao must have a strong and more practical law in safeguarding national security, in order to prevent and suppress any interference by external forces and to safeguard more effectively national sovereignty, security and development interests."

He added that the proposed amendments also amount to a proactive step "based on current development trends and the need to target actual national security issues. Consequently, Macao must uphold its bottom-line thinking and conduct comprehensive risk assessments and precise judgements concerning the amendment process. Safeguarding national security is not only the constitutional responsibility of the Macao Special Administrative Region (MSAR) but also the legal responsibility of all Chinese people including Macao residents."

Talking to more than 200 people, the chief executive said, "during the consultation period, people with ulterior motives might make a big fuss over the proposed amendments, or even agitate in order to impede or undermine the amendment process through radical approaches."

He called on the public "to refute all hostile attacks and untrue information about the amendments, and have a clear-cut stance on guiding the amendment process and eliminating all potential interference."

WAY FORWARD FOR THE ECONOMIC DEVELOPMENT OF MACAO

According to a draft released in August during a press conference held by Secretary for Security Wong Sio Chak, the local government is proposing to extend the coverage of certain existing criminal offences listed in the local national security law, and add new criminal offences to the law.

The local government also proposes to upgrade its national security law to a complete and comprehensive piece of legislation, a change from the current version which is merely a criminal law that punishes offences endangering national security.

Wong said that the security landscape globally, as well as in countries and regions surrounding Macao, has seen profound changes since the implementation of the local national security law. Given the ongoing interrelation of traditional security threats and non-traditional ones, Wong said, the nation's and Macao's security and development are facing new and more serious challenges.

The country's current national security law, officially known as the National Security Law of the People's Republic of China, was enacted in 2015, while Hong Kong's national security law, which was enacted by the Standing Committee of the NPC, came into force on 30 June 2020. The public consultation document proposes that Macao's national security law should be amended in such a way that will meet the requirements outlined by the Overall National Security Outlook, which lists various non-traditional threats to national security that the nation is facing, in addition to the traditional ones.

NON-VIOLENT MEANS

According to the consultation document, the local government proposes that secession by non-violent illegal means should also be punishable.

Article 2 of the current version of the local national security law, concerning the crime of secession, covers those who use violence or other grave illegal means in an attempt to separate the Chinese territory from the nation or subject it to the sovereignty of another state.

The local government also proposes that subversion against the Central People's Government, as defined by Article 3 of the current local national security law, should be extended to subversion against the political power ruling the nation.

The document notes that the current version only covers subversion by violence or other grave illegal means. The local government proposes that subversion by non-violent illegal means should also be punishable.

Moreover, the local government also proposes to widen the definition of the crime of sedition as enshrined in Article 4 of the current version of the local national security law. The current version covers those who publicly and directly incite others to commit treason, secession or subversion against the central government.

The consultation document proposes to also punish those who publicly and directly incite others to participate in turmoil endangering national stability.



While the current version of the local national security law targets "foreign" political organisations or bodies endangering national security in Macao, the government now proposes that the crime should be extended to organisations or bodies "outside" the MSAR.

Wong noted that "external hostile forces do not only come from foreign countries but can also from non-foreign regions outside Macao" and that "organisations or bodies that endanger national security are not necessarily political ones".

According to the document, the government also proposes the setting-up of specific criminal procedures to tackle cases of endangering national security, such as barring people under investigation for suspected national security law violations from leaving Macao for up to five days. Secretary for Security Wong Sio Chak (centre) and other government officials answer press questions on the proposed amendment

The government also wants to introduce specific measures to intercept telecommunications with the aim of preventing crimes endangering national security.

For Secretary Wong, the Hong Kong riots and violent protests against the government in 2019 are stark reminders that Macao needs to improve its national security "with the aim of preventing Hong Kong's previous chaos from happening in Macao".

In addition, Wong also said during the press conference that the government aims to publish a report at the end of October summarising the findings of the ongoing public consultation process, after which it will be able to submit the amendment bill to the Legislative Assembly in early November for debate and vote.



NEWS set to return

Visitor numbers are expected to double when mainlander tour groups return to Macao, possibly in late October.

Text Christian Ritter Photos Xinhua News Agency

While still short of pre-pandemic numbers, the expected 40,000 visitors per day will be a boon to Macao's economy

Mainland tour groups

T our groups from the mainland will L be allowed to visit Macao as early as "late [October] or early November," said Chief Executive Ho Iat Seng on 24 September. Ho spoke at a special press conference at the Government Headquarters, to relay information from a video conference held with Vice Premier Han Zheng the day before.

Ho said mainland authorities will also start issuing electronic permits (e-permits) for individual travellers again "very soon." Tour group and individual e-permits for mainlanders were suspended from early 2020, in response to the Covid-19 pandemic, meaning mainlanders had to apply in person for permits – a more arduous process. The mainland was Macao's main source of visitors before the pandemic. Since 1 September, foreigners from 41 countries have been allowed back to Macao.





(Opposite page) Chinese Vice Premier Han Zheng, also head of the Central Leading Group on Hong Kong and Macao Affairs, presides over a video conference in Beijing

MANDATORY QUARANTINE TO REMAIN

While Hong Kong has scrapped mandatory hotel quarantines for all arrivals in the city, Macao will not, said Ho. He confirmed that the current "7+3" arrangement – seven days in hotel quarantine, then three days self-monitoring for Covid-19 at home - will remain for anyone from outside the mainland. This is in keeping with policies issued for the mainland. "Hong Kong's decision is not related to Macao," Ho said. The easing of quarantine restrictions was not discussed in the video conference, he added.

The government expects daily numbers of visitors to double once tour groups are allowed back in, said Ho. That would bring arrivals to 40,000 a

day, still far off the pre-pandemic average of 110,000. Ho acknowldged Macao struggled to cope with prepandemic numbers, adding that the government was aiming for more manageable 80,000 daily arrivals in the medium-term.

According to official figures, Macao received 39.4 million visitors in 2019, 71 per cent of them from the mainland. In 2021, just 7.7 million people visited the city - 91 per cent of them mainlanders. The first tour groups and individuals with e-permits allowed back into Macao will be from the provinces of Guangdong, Jiangsu, Fujian and Zhejiang and the city of Shanghai. In the event of a covid outbreak in these places, Ho said travel would likely be halted.



"THE ECONOMY IS THE PRIORITY OF PRIORITIES"

Ho admitted that Macao's economic situation has been "very difficult" during this time. On the same day he spoke with Han, the government announced Macao residents will receive an additional MOP 8,000 (US\$1,000) e-voucher in October to help alleviate financial strains.

"The economy is the priority of priorities," said Ho. He outlined several infrastructure projects discussed with Han in their video conference that would benefit Macao. One was extending Macau International Airport's runway so more planes could be accommodated. Another was

dredging Macao's coastal waters to make it easier for ships to safely navigate the city's waters. The new Light Rapid Transit (LRT) line between Taipa and the Qingmao border in the Macao peninsula is another major project, construction of which is set to begin in 2023. To facilitate transit between Macao and the mainland, the government is planning on leasing a 10,400-square-metre plot of land from Zhuhai - right next to the border. Prior to this, the closest LRT station to the border was projected to be a 10-minute walk away. With this new development, travellers will only need to walk for 2 minutes to reach the

Qingmao border.

Ho and Han also discussed further development of the Guangdong-Macao In-Depth Cooperation Zone, in Hengqin. Set up one year ago, the Zone encourages more cross-border collaboration and investments under the "One country, Two systems" principle. Despite the differing legal systems between Guangdong and Macao, the two will co-administer the zone under a pilot governance scheme. Macao will implement civil and commercial laws, while mainland authorities handle public security matters.

Han concluded with emphasising the central government's "full support for Macao in speeding up its infrastructure construction and appropriately diversifying the economy."



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A bridge to the future

With a new bridge linking Macao and Taipa set to open in 2024 - the fourth constructed in just 50 years - the city's development is beginning to take new shape.



Text Gonçalo César de Sá

The three bridges currently standing speak to nearly a halfcentury of incredible growth in the city

W hen a fourth bridge opens linking the Macao peninsula to Taipa island in 2024, 50 years will have passed since the first bridge linking both sides officially opened. Much has changed since then.

In a clear demonstration of the development of Macao since 1974, the city built another three bridges in the intervening period to cope with the increase of traffic to and from the Macao peninsula and the islands.

The first bridge, the 2.5-kilometre Governor Nobre de Carvalho Bridge, was opened in October 1974. Local resident Martinho Alcântara Pedro recalls with pride the first day he

could cross the bridge, "built by the famous Portuguese engineer Edgar Cardoso", from Macao to Taipa.

"We were so proud and happy because it showed that Macao is more developed, and the government [intended] to modernise the islands of Taipa and Coloane," says Pedro.

Two decades later, in March 1994, while Macao was still under Portuguese administration, the 4.7-kilometre Friendship Bridge opened, and in December 2004, after Macao had been returned to Chinese administration, the 2.2-kilometre Sai Van Bridge opened in the Nam Van area.

Now, the city is building a new link that represents a large step forward. Macao expects to open its fourth and latest bridge in the first quarter of 2024 as it continues to enhance its transport network and more fully integrate in the Greater Bay Area.

A NEW MOP 6.7 BILLION-BRIDGE

The new 3-kilometre bridge has been in the works for a long time. More than two decades, in fact. When all is said and done, it will connect the Zone A reclamation zone - where urban development

areas under construction will accommodate around 90,000 people, and where the customs border of the Hong Kong-Zhuhai-Macao bridge is located - with Zone E1, near the ferry terminal, airport and LRT (Light Rapid Transit) metro station. Construction started in August 2020, carried out by a joint venture consisting of three companies for a price tag of MOP 5.27 billion. The building consortium consists of two state-owned enterprises - China Civil Engineering Construction Corporation (CCECC) and China Railway Construction



Bridge Engineering Bureau Group Co Ltd - and local construction company Omas Construction and Engineering Company Limited.

The four road accesses to the new bridge - adjudicated to local companies Nam Fong/Tat Cheong, Ming Shun, Tong Lei and Top Builders Group - will cost another MOP 1.4 billion, adding up to a total price of about MOP 6.7 billion.

Since the project began, Macao residents that cross the Friendship Bridge have been able to follow its near-daily development. Barring times when typhoons lashed Macao, the work has never stopped, and so commuters will have witnessed huge cranes laying the foundations. Other spots in Macao have also given everyday people a chance to watch this transformational project come to fruition.

On top of Taipa Grande, for example, residents can enjoy a fantastic view of the project. A group of students have taken photos of its progress from this vantage point since the project began.

"We are from the Macau University of Science and Technology (MUST) and we are taking photos of the work done in the construction of the bridge, every month and from the same angle, for a paper we are preparing for the class," said one student, who is studying architecture at the university. "It is a great opportunity ... because our photos could be kept for the future history of Macao development."



The fourth bridge, marked in purple, will alleviate traffic pressures and provide a convenient link for new residential construction in Zone A

FURTHER INTEGRATING MACAO INTO THE GREATER BAY AREA

connect two pieces of land; they confidence and status of societies able to build them.

By investing in another connection between Macao and Taipa, Macao aims to do more than simply build infrastructure. "The fourth Macao-Taipa bridge will add a much needed and anticipated connection between recent urban reclamations," José Luís Sales Marques, economist

BRIDGE	CONSTRUCTION	LENGTH	
Nobre de Carvalho	June 1970 – October 1974	2.5 km	
Amizade (Friendship)	June 1990 – March 1994	4.7 km	
Sai Van	October 2002 – December 2004	2.2 km	
Fourth Pridge	August 2020 - 2024	3 km	
Fourth Bridge			

Bridges don't just physically also connect people and project the

NO. OF LANES

1 each side

2 each side

3 each side

4 each side

and president of the Institute of European Studies of Macau, said to *Macao* magazine.

He added that the bridge will not only reduce congestion between Cotai, Macao's entertainment and gaming hub, and residential Taipa, but rather enhance travel between the areas. By alleviating traffic in Cotai, it will make accessing Hengqin much more convenient which will in turn also facilitate movement across the Greater Bay Area via Guangdong.

Christine Choi, president of the Board of Directors of the Architect Association of Macau, agrees. "A new bridge and the extension of the LRT are the natural development of a place that has more population, traffic, visitors and tourists, and [bolsters Macao's] integration in the Greater Bay Area," she said.

While the three other Macao-Taipa bridges respectively have one, two and three vehicular lanes in each direction, government officials noted that this bridge will have eight vehicular lanes - four in each direction. One lane in each direction will be for motorcycles only. Pedestrians and cyclists, however, will be prohibited from using it.

Wind protection barriers will be installed, enabling it to remain open to traffic even during signal no. 8 typhoons.

It will also have two spurs with vital connections: one connecting to a man-made island where the Macao and Zhuhai border checkpoints are located, east of Zone A, and another to a future tunnel under Taipa Grande that will end in the roundabout near MUST, making for fast and easy access to central Taipa.



Passing motorists have had a front-row seat to the construction process, expected to finish in early 2024 The tunnel is expected to be located between the Taipa cemetery and the incineration plant, but Public Works officials underlined that the government is still designing this project and could not provide a timetable for its completion.

A CRUCIAL TRANSPORT HUB

The bridge is opening at the perfect time. A raft of public housing projects, with 12,000 residential units, are currently being carried out in Zone A. According to officials, these projects will be completed in early 2024 and others in mid-2026, signalling the direction in which the city is developing.

The government is also studying the construction of an underwater tunnel for a future LRT line. This new project will run from the Portas do Cerco border area, cut across Zone A, link near the airport and connect to the existing LRT line that crosses Taipa.

With the new bridge and the future LRT both connecting the Macao peninsula to Taipa, tourists will find it much easier to enter the city either through the Portas do Cerco border or via the Hong Kong-Zhuhai-Macao Bridge and reach the entertainment facilities in Cotai.

To Wong Seng Fat, associate professor in the Faculty of Science and Technology at the University of Macau, "the new bridge can also achieve the effect of connecting all transport by sea, by land or by air, with more convenient traffic solutions, which will give more motivation and confidence to Macao residents to participate in the development of the Greater Bay Area."

Wong believes the new bridge will benefit locals above all, though. "The new bridge will reduce the traffic pressure in the area of the Friendship Park in Hac Sa Van district, where a great number of vehicles cross from the northeast of the peninsula across the Friendship bridge."

The symbolic weight of this bridge cannot be overstated. With the sea, land, rail and sky connected, traffic flows improved and long-term urban planning goals beginning to materialise, Macao is taking another large step forward on the road to the future. •

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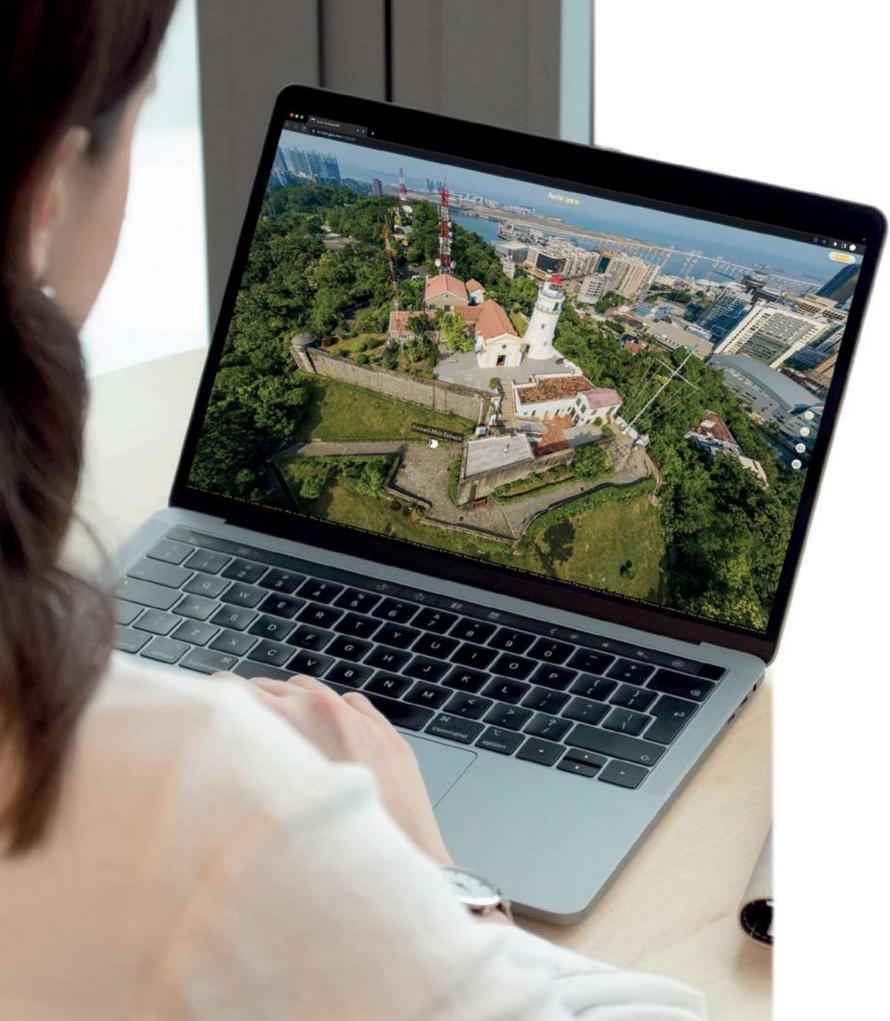
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ARTS & CULTURE

Macao's heritage goes virtual

If visitors can't come to Macao in person, they can still experience the city's major museum exhibitions and cultural heritage sites - thanks to virtual reality.

Text Gilbert Humphrey Photos courtesy of **Cultural Affairs Bureau**

∧ n aerial view frames the heart of **A** Macao, where jauntily coloured rooftops hug a low-slung compound. A piano starts playing in the background, then a woman's voice welcomes online visitors to the Mandarin's House, in São Lourenço, which is one of 22 buildings forming Macao's UNESCO World Heritage-listed Historic Centre. The shot pans into a manoeuvrable 720-degree view of Macao. A glimpse of Barra, the Inner Harbour, Taipa and the Macau Tower unfolds. The guide delivers a brief history of the Mandarin's House, a 4,000-square-metre Chinesestyle residential compound once home to the late Qing dynasty reformist Zheng Guanying (1842-1922) and his family. Using virtual reality (VR) technology, visitors can navigate inside and around the exquisite 66-room structure - all from the comfort of their own home. The Mandarin's House is just one of 11 "Online Virtual Tours" developed

by Macao's Cultural Affairs Bureau (IC). An array of digital adventures let visitors explore exhibitions at the city's museums and iconic heritage sites like the Tak Seng On Pawnshop and Guia Fortress. Available in Cantonese, Mandarin, Portuguese and English, the tours are part of the city's plan to innovate tourism using new technology and "turn Macao into a smart city", according to Sam Hou In, head of IC's Department of Exhibitions and Museums.

IC launched its first VR tours in 2020 as part of an ongoing effort to digitise Macao's museum resources and make them easier to access.

The tours harness VR technology to bring a "richer, more diverse and interesting personalised viewing experience to residents and visitors," says Sam. "Virtual exhibitions can break the limitations of time, space and display conditions."



Sam Hou In, head of Cultural Affairs Bureau's Department of Exhibitions and Museums, says the VR tours provide a richer, more diverse, and interesting personalised viewing experience In other words, anyone can experience the treasures of Macao anytime, from anywhere. In some cases, visitors can see more online than in person. VR gives individuals a bird's eye view of heritage sites, and lets them zoom in on objects kept safe behind glass or inside acrylic boxes. Visitors can also enjoy the tours at their own pace, stopping to read or listen to information as they like. To date, about 9,000 visitors have experienced Macao by VR. Most tune in from the mainland - Guangdong, Liaoning and Shanghai account for the main sources of views – and Hong Kong, says Sam.

The IC is preparing to launch its next VR tour of the UNESCOlisted World Heritage Site Ruins of St Paul's soon. Located in the heart of Macao's Historic Centre, this 17th-century Catholic complex is one of the city's most recognisable landmarks. It's also one of the Seven Wonders of Portuguese Origin in the World.

Sam says the Ruins' inclusion in IC's VR project will "better illustrate the unique history and culture of Macao, characterised by centuries of cultural fusion between the East and West." Na Tcha Temple, Lou Kau Mansion, and a section of the Old City Walls are also scheduled to become VR tours in the future.

IC will continue to "actively promote the integration of cultural heritage resources and technology," says Sam. "We hope to enrich visitors' cultural and tourism experience in Macao through these initiatives." The IC has so far launched 11 online tours on special exhibitions, museums and some of Macao's cultural heritage sites, with many more in the pipeline including the city's most-famous landmark, the Ruins of St Paul's. Here are a few of the highlights:

MACAO MUSEUM OF ART

Opened in 2008, the Macao Museum of Art is the only museum in the city dedicated to the arts. The 10,000-square-metre, five-storey building collaborates regularly with museums outside Macao, including Beijing's Palace Museum, to bring a wide variety of creative endeavours to the city. The IC's VR tours guide visitors through several captivating exhibitions, including a collection of contemporary ink art, the works of 20th-century Chinese painter and woodblock printer Shi Lu, a display of Ming dynasty imperial kiln porcelain, and royal clothes worn by Qing emperors and empresses.







EXPERIENCE MACAO IN VR



MACAO MUSEUM

Located on Mount Fortress, which Jesuits built as a military defence in the early 17th century, the Macao Museum opened in 1998 with a mission to showcase the city's complex history and cultural diversity. With VR, visitors can explore fascinating exhibits across the threestorey building, including local industries and children's traditional toys, Macanese customs and food, as well as Portugal's footprints in Asia, such as the 16th-century Portuguese sea route to Japan en route Macao.





THE MACANESE LIVING MUSEUM

Part of the Taipa Houses-Museum, this museum is one of five Portuguese-style residences built in 1921 and once home to prominent Macanese families. Opened to the public in 1999, the Macanese Living Museum is a beautifully furnished portal to the past. And now, VR lets visitors see, room by room, how people lived during this era.

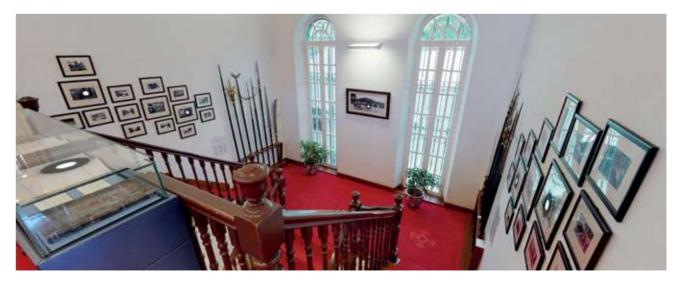










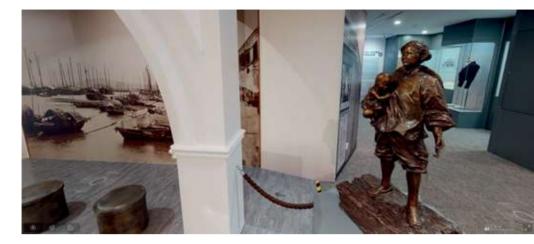


MUSEUM OF TAIPA AND Coloane History

Formerly a public administration office, this mint-green Portuguesestyle building boasts nine galleries full of excavated relics, historical artefacts, religious objects, handicrafts and architectural models from the islands of Taipa and Coloane. The museum, which opened in 2006, gives people a better understanding of modern day Taipa and Coloane – as well as the islands' history.

XIAN XINGHAI Memorial Museum

Xian Xinghai (1905-1945) was an influential Macao-born Chinese composer, best known for his "Yellow River Cantata". Housed in a two-storey 1950s villa on Rua de Francisco Xavier Pereira, the eponymous museum has showcased Xian's life and artistic achievements since 2019.







TAK SENG ON PAWNSHOP

Meaning "Virtue and Success", the beautifully preserved Tak Seng On Pawnshop opened along Avenida de Almeida Ribeiro, one of Macao's main thoroughfares, in 1917. Its architecture, interior design and furniture are emblematic of pawnshops found in the mainland in the early 1900s. In the VR tour, digital travellers can examine abacuses and stamps used in day-to-day business up-close, then venture up stairs into an attic where visitors will find multi-layered shelves, which were once used to store pledged articles like cotton quilts, clothes and electrical appliances.

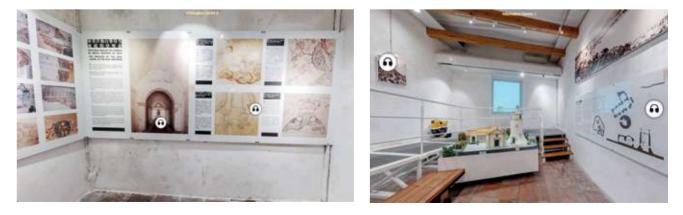












GUIA FORTRESS

The Portuguese built this 17thcentury colonial military fort and chapel on top of Guia Hill in 1622. The lighthouse, added in 1865, is the oldest Western-style lighthouse in all of China. The fortress occupies about 800 square metres and stands in stark contrast to surrounding apartment blocks – as seen in the VR tour, where visitors can also explore the historic typhoon signal room, a lookout, and the information centre that keeps photos of the fortress from different eras.

MANDARIN'S HOUSE

Reformist Zheng Guanying's father, Zheng Wenrui, built the Mandarin's House around 1869, near Lilau Square. It's a striking combination of Chinese-style architecture with a mix of Western features. The Zheng family lived there for years before renting the house out until the 1990s. Today, it has been transformed into a fascinating heritage site that can be treasured in-person or via virtual reality.



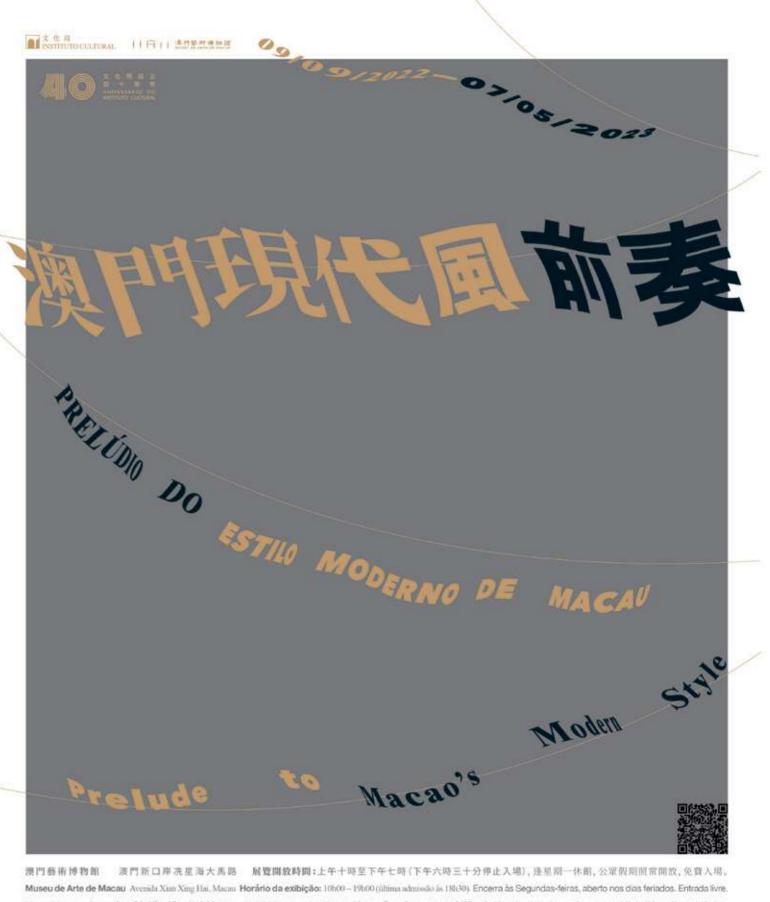




Curious about IC's VR heritage tours?

Explore at your convenience on the official website (vr.icm. gov.mo) using Chrome, Brave or Safari browsers for the best experience. The tours do not work via Internet Explorer.





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ARTS & CULTUR

The right notes

Since 1997, the Macao Youth Symphony Orchestra has helped to raise the bar for aspiring classical musicians in the city.

2022 01.02

MACAO

CONCERT

NEW YEAR'S

The Macao Youth Symphony Orchestra performed in the 14th Macao New Year's Concert 2022 in January this year Text Gilbert Humphrey Photos António Sanmarful

M acao's appreciation for classical music has come a long way since the 1990s. Violinist Jimson Hoi Kin Wa says that just a few decades ago, the only instruments city residents could easily identify were the violin and piano. But then Hoi and his colleagues at the Macao Youth Symphony Orchestra (MYSO) set out to grow classical music from the ground up.

In 1997, they established the MYSO – which focuses mainly on classical music but also sometimes contemporary and original compositions – aiming to educate the youth of Macao. Hoi has been its president since the beginning. "At that time, there was nothing in Macao, so we tried to build something [for the youth] ... we wanted them to be interested [in music]," he says.

Today, that goal has been achieved. As the group celebrates its 25th anniversary, it boasts over 200 students and more than a dozen conductors. More than 80 of the MYSO's students have also been accepted into well-known conservatories or music schools around the world. Now, Hoi aims to continue to grow the MYSO community into something more than a training ground for classical musicians.



Jimson Hoi has been the president of Macao Youth Symphony Orchestra since it was established in 1997

GETTING IN SYNC

Born in Guangdong in 1962, Hoi and his family migrated to Macao in the late 1970s, when he began to study music at St Pius X Music Academy. At the age of 19, he became the youngest member of the Macao Chamber Orchestra when it was established in 1983, and he would continue to play in the orchestra - known as the Macao Orchestra since 2001 - for the group's first 13 music seasons.

In the early 1990s, he joined the arts management undergraduate course at the University of Hong Kong.

In his first two years with the Macao Chamber Orchestra, Hoi was twice selected to represent Macao at the annual Hong Kong Youth Music Camp, a classical music event organised every summer by Hong Kong's Music Office that allows young musicians to receive training from established musicians and instructors. When Hoi looks back, this youth music camp was what sparked the idea to start the MYSO.

In 1995, Hoi left the Macao Chamber Orchestra to focus on teaching classical music at local schools. After about two years of teaching, he and a colleague, Wong Ka - who is now the Macao

Orchestra's marketing manager - came up with an idea to organise a student orchestra. In its concept, they drew on the training practises Hoi learned at the Hong Kong Youth Music Camp.

They shared the idea with another colleague, Leung Kin Hang - then a conductor of the Macau Police Band and the head of the Macau Band Directors Association, and now an MYSO conductor - as well as with head of Pui Ching Middle School. The school agreed to allow the newly formed MYSO to rehearse at the school's facilities.

In the beginning, Hoi recalls, "We were simple. We didn't think about the money, we didn't think about the time." The group only had several dozen students enrolled from Pui Ching Middle School and Sacred Heart Canossian College, Macau. They even offered the students to learn for free, says Hoi, all with the mission of enhancing musical education in Macao. Now, the orchestra is made up of primary and secondary students who learn about more than just music.

Every year since the MYSO was founded, the orchestra puts on one symphony concert and about two to three other performances in Macao, involving more than 600 students combined. Hoi says the students learn a lot from playing in these events: how to cooperate, how to listen to others, how to lead and how to obey leadership, too.

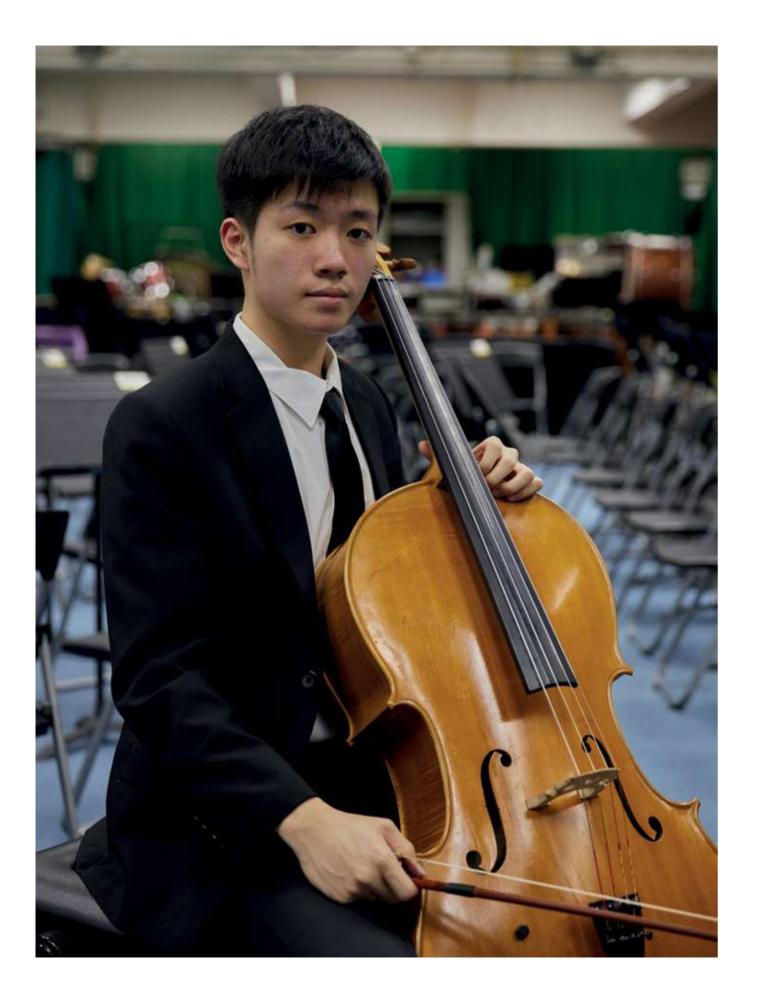
"In the orchestra, if I play the melody, then my instrument's sound will be leading, and the others will be in harmony to accompany the melody. And if the melody switches to another instrument, then I change to be part

of the harmony, not the melody. So, I have to listen to [other] people," says Hoi. "This is not only for music. When you are in school or working in the community", one must know what one's role is. he stresses.

A GLOBE-SPANNING MUSICAL JOURNEY

Since its inception, the local They performed at all three in 2010.

youth orchestra has given over 800 performances, about 90 per cent of them performed locally. Apart from local concerts, the MYSO has also gone abroad for 12 concert tours, dating back to their first international tours in Australia and Singapore in 2007. They have continued to visit many other places every year. They have performed in Austria, France, Japan, Thailand and the United States, as well as different cities across the mainland and several top music festivals, including the Lisbon International Youth Music Festival, Italy's Musica Riva Festival and the Young Euro Classic in Berlin, Germany. The same year, they performed with the Prague Philharmonia in the Czech Republic, and with the Portuguese Symphony Orchestra back home for Macao's New Year Concert. The MYSO has also collaborated with the National Youth Orchestra of Germany, the Australian Youth Orchestra, Belgium's Liège Royal Philharmonic Orchestra and Mexico's National Symphony Orchestra. "Our [students] are not professional music students; it was such an encouragement for them to play with professional musicians," says Hoi with pride.



PRESENT CHALLENGES, PROMISING FUTURE

Since 2020, the MYSO has not been able to continue their tours overseas. Their financial support - from various sectors, including the government – has decreased during the pandemic, forcing the group to reallocate budget for musical training and operational costs (the MYSO is based in the Wa Long Industrial Building near the Red Market).

"In Macao, people are not used to being [financial] donors, even the sponsors from the business sector," Hoi says, adding that he believes it is important to support Macao's art and culture.

Despite lacking steady financial support, the orchestra has managed to attract and develop tremendous young talent, such as Edward Chio and Kelly Chan.

Two of the most promising stars in the programme, Chio, a Form 6 student at Yuet Wah College, and Chan, a Form 4 student at Sacred Heart Canossian College, are the MYSO's principal cello and bassoon players, respectively.

Chio joined MYSO in 2016 but his cello training began much earlier, when he joined the Macao Conservatory at the age of six. His mum, Cheong Wai Nei, a music teacher at St Paul's School, initially taught him to play the piano, but when he heard the cello for the first time, he was hooked. "It sounded warm and beautiful," he recalls. "Classical music always brings me calmness, different to other types of music. It's like a language without words. The composers tell their stories through music and the players, and the audience must be very concentrated to understand and notice the details in the music," says Chio, whose 11-year-old brother also plays trumpet with MYSO, while his nearly four-yearold sister has started to learn the piano at home. After finishing secondary

After finishing secondary school, he plans to study music in Austria, majoring in his original instrument, the piano, while opting for a minor in the cello. "In the future, I wish to be part of a symphony orchestra in Europe," he declares. But someday, he adds, he would like to return and teach music in Macao and make classical music more popular in his hometown.

66 Classical music always brings me calmness, different to other types of music. It's like a language without words.

- Edward Chio

(Opposite page) MYSO principal cello Edward Chio hopes classical music will become more popular in Macao



MYSO principal bassoon Kelly Chan dreams to become a music teacher in the future

Chan also dreams of being in a symphony or becoming a music teacher. She plans to continue her classical music studies in the United Kingdom. "There are so many teachers and musicians who study classical music there," says Chan, who started playing the piano at age four and picked up the bassoon when she was about nine years old at the urging of a schoolteacher. "The sound of bassoon is very attractive. It's like an old man [with a deep voice] telling a story," she explains.

That instrument has helped her to discover an even deeper love for music since she joined the MYSO in 2019. "I love the feeling of playing

music with other people. And having so many different instruments joined together, making sound at the same time, I think it's very grand."

The musical dedication shown by Chio and Chan are exactly the reasons why the MYSO remains committed to training Macao's young classical musicians and creating a higher standard for the city's symphony orchestras.

Hoi hopes that the students who train with the MYSO will someday carry the torch for him in Macao as well. "This is your home. Come back to Macao to develop your music career here, to have your music life here," he says.



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ARTS & CULTURE

Honouring Macao's modernist buildings

Docomomo Macau's new Walking Guide celebrates the city's modernist architecture and conveys an urgent message: preserve these treasures, lest our collective memory be lost.

Text Gilbert Humphrey Photos courtesy of Docomomo Macau

(Opposite page) Cinema Alegria was built from 1950 to 1952

Local architect Rui Leão vows to continue fighting for the protection of modern architecture in Macao M ore than a decade ago, local architect Rui Leão fought against potential demolition of the building currently occupied by the Macau Portuguese School. The Brutalist building – previously home to the now defunct Escola Comercial Pedro Nolasco – is both an impressive feat of 1960s design and a cultural tribute to Macao, incorporating Portuguese tiles and Chinese-style courtyards. Leão won (sort of): the building remains in situ, but is not officially protected.



Leão believes such a culturally significant structure should be protected, along with the rest of Macao's at-risk 20th-century architecture. This includes the likes of Cinema Alegria, an Art Deco building built in the early 1950s, and the highly distinctive Red Market, constructed out of claret-coloured bricks in the 1930s. So, five years ago, Leão embarked on a mission to chronicle such buildings. The resulting Macau Modern Architecture Walking Guide was published in September. This 100-page coffee table-style book delves into the histories of 37 buildings built between the 1920s and 1970s. It includes eight curated walking tours designed to get readers outside and appreciating architecture in person.

Leão, 53, heads Docomomo Macau, an independent branch of Docomomo International. Founded in 1988, Docomomo International is a global non-profit organisation focused on studying and preserving 20th-century Modern architecture. Also known as the Modernist era, this period produced buildings noted for the use of glass, steel and reinforced concrete. Minimalistic structures were favoured – a rejection of the many Revivalist styles – and function inspired form.



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Modern architecture was significant because it looked nothing like the traditional architecture, which was done with materials like brick and wood and stone.

– Rui Leão

Art Deco, Brutalism, Bauhaus, and what's come to be known as Mid-century Modern fall under the Modernist umbrella. Docomomo is a portmanteau standing for the DOcumentation and COnservation of buildings, sites and neighbourhoods of the MOdern MOvement.

"Modern architecture was significant because it looked nothing like the traditional architecture, which was done with materials like brick and wood and stone," says Leão. He describes the first generation of Modern architects tackling "more daring architectural design."

"The spaces could be much bigger, the windows could be so wide, the roofs could be flat and the rooftops could be used as gardens or public space. These were very radical moves and visually very different from everything that was built up until that time."

FISHING VILLAGE TO GAMING HUB

Modernist architecture's rise coincided with Macao's transformation from simple fishing village to cosmopolitan city. While gaming was legalised by the Portuguese administration in 1849, it only started attracting international attention in the 1960s. That's when the Sociedade de Turismo e Diversões de Macau introduced Westernstyle gambling and began ferrying people between Macao and Hong Kong - massive draws for Macao. In the Macau Modern Architecture Walking Guide, that burgeoning era of the gaming industry is represented

by Hotel Lisboa's original 12-storey casino-hotel tower, built in 1970. Other featured buildings include the Rainha D Leonor residential building, next to Hotel Sintra; Pier 16 in the Inner Harbour; Luís Gonzaga Gomes High School, an important example of Macao's 1940s brand of architecture; the salmon-coloured D José Da Costa Nunes Kindergarten, an early Art Deco gem; Our Lady of Fátima Church, built right after the city's 1966 riot against the Portuguese administration; and the teal Pacapio building, built in 1964 by Macao's most-celebrated architect, the late Manuel Vicente. Most are located in the Macao peninsula.

(Opposite page) The Macau Portuguese School (EPM) building was built in the 1960s

(Centre) The Red Market, built in the mid-1930s, is one of Macao's most popular wet markets

Rainha D Leonor apartment block, built from 1958 to 1961, was the city's tallest building in those days

(Opposite page) The Pacapio building, built in 1964, is a masterpiece of the late Manuel Vicente, Macao's most-celebrated architect Unfortunately, many of Macao's modern buildings have been poorly maintained and very few are officially protected; a fact Leão describes as "sad". The Rainha D Leonor building is one of these. Macao's tallest residential building when constructed in the 1950s, it was designed by Macao-born Hong Kong architect José Lei to resemble one of Le Corbusier's famed Brutalist apartment blocks in France. Le Corbusier is one of the best-known pioneers of Modernist architecture.

Leão says he sees Macao's Modernist buildings as tangible links to a more culturally enlightened past, when the city was more than glitzy casinos. He wants local authorities to grant them protected status. "If they



Interested in grabbing a copy?

The Macau Modern Architecture Walking Guide is available for purchase at Pin-to, Macao Polytechnic University, Jubilo bookstores and the Portuguese Bookshop. don't, anyone can very easily say, "There is no reason to preserve this building so let's just demolish it," he laments.

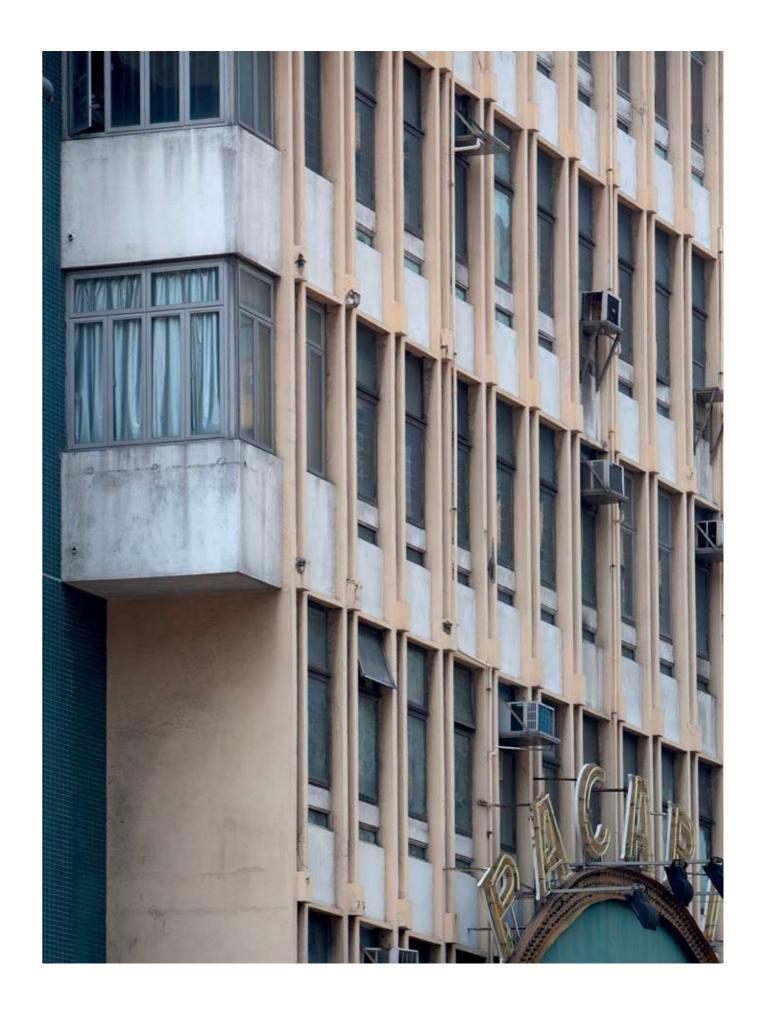
"If these buildings go, we're just left with these big money machines."

BUILDINGS THAT PRESERVE A COLLECTIVE MEMORY

University of Macau professor and former lawmaker Agnes Lam agrees with Leão. She was a guest speaker at the Walking Guide's launch at Pin-to bookstore, on 15 September. Lam, 50, spoke about how Macao's Modernist buildings have borne witness to the city's transformation from low-rise to high-rise; from street food stalls to having everything indoors. Without them, a special part of Macao will be "lost to history," she says. Lam says the new book will help locals better understand themselves, their families, and their city.

"They provide collective memory about local families, friends, communities and places that are still very much remembered by many people in Macao, including myself."

Docomomo Macau is hosting a series of events to promote the new book. Events will include discussions on what can be done to better protect modernist buildings, and about the eight tours described inside the *Walking Guide*.



「年代職證有影性物證業務。今次並作前重至18月1 ·学研三教教授为臣本道会·居下是"是来 学校演员内在影响是完大化。

ARTS AND CULTURE

Keeping traditions afloat in Coloane

Two former shipyard workers are on a mission to preserve and promote Macao's shipbuilding heritage, albeit on a smaller scale.



Text Gilbert Humphrey Photos Denzel Calangi

Macao's shipbuilding industry enjoyed its golden era between the 1970s and 1990s

am Wai Kao was around 10 years L old when he began to make wooden ship and boat models. As a child, he would often play by the shore and experiment to see if his tiny vessels could float on the water. "That was my hobby when I was

little because I loved the sea," he says. Lam always felt that pull of the

open water and eventually took a job in the shipbuilding industry at the age of 18. Today, the 70-year-old retiree still builds ships, just smaller versions of them, like the ones he made when he was a child.

Almost every day, Lam goes to the Shipyard Workers Association of



Macao headquarters in Coloane Village to build model wooden ships: 10 to 15-centimetre-long boat miniatures, 20 to 30-centimetre-long sampans and over 1.5-metre-long ship models. "I spend at least 300 days a year in this place," he says.

Lam is not labouring alone. Several other former shipbuilders have shown interest in preserving Macao's shipbuilding traditions by making small wooden replicas, either with the association or independently. Although it hasn't always been smooth sailing, their efforts to keep Macao's maritime heritage afloat through miniature wooden models might pay off.



Lam Wai Kao and his wooden ship model that won 3rd place in the 2020 Shenzhen Scale Model Competition

(Opposite page) A wooden ship model takes shape under Lam Wai Kao's practiced hand

WINDS OF CHANGE

Macao's fishing and shipbuilding industries experienced a golden era between the 1970s and 1990s, when almost everyone in Macao wanted to be part of it. Back then, the city was still a fishing village – not yet the metropolitan hub it has become today – and the shipyards were seen as the lifeblood of the city. Coloane was once home to more than a dozen shipyards, which were located in Lai Chi Vun Village.

Macao's wooden ships and dragon boats were so renowned that even Hongkongers sought out shipbuilders in Macao, despite having its own industry at home. According to Lam, Macao builders were known for using high-quality wood and expert craftsmanship – both of which attracted Hong Kong buyers, who typically used the boats for fishing. Usually, they would purchase a couple of ships from Macao each year until about the mid-2000s when the city's industry ceased building ships.

"Shipbuilding was Macao's No. 1 or 2 industry in those days. It was like the gaming industry of that time – how it was connected to at least five other industries, including machines, wood, and even food and beverage," says Tam Kam Kwong, the association's president and a close friend of Lam.

Between the 1970s and 1980s, it would cost several hundred thousand Hong Kong dollars to buy a Macao-built wooden ship. The price went up to one to a few million dollars per ship in the 1980s and 1990s, a golden era when the industry employed several thousand people in Macao, according to Tam, who took a job as a shipbuilder at a family friend's shipyard in 1972.

"That included freelancers," says the 64-year-old who, like Lam, transitioned from building full-scale wooden ships to crafting models in 1999, when the industry began to decline.

In the 2000s, steel ships became more popular because they were cheaper and faster to build, as well as more durable than wooden ships. In addition, people became more aware of environmental issues associated with logging, material shortages and the higher risk of fires on wooden boats. The combination of concerns, coupled with the rise in steel manufacturing, impacted the local wooden shipbuilding industry, according to both Tam and Lam.

"People stopped cutting trees for wood, so no more materials were shipped to Macao to make large wooden ships," Tam recalls. "This is something we [could not] do anything about and had to accept, as the whole world [was] changing. The shipbuilding industry changed from using wood to using steel to build ships." Even so, Tam believes it has been a positive development in the broader scheme of things. "I'm okay with people no longer cutting [down trees for wood] because it can protect the environment. Besides, I think it's better for the fishermen these days to use steel ships, which are better in quality and more stable."

But the two friends aren't letting Macao's wooden shipbuilding legacy fade. Lam and Tam together are working to pass down the tradition by handcrafting miniature ships at the association's headquarters-turnedstudio. Currently, the association has dozens of wooden ship and boat models on display, some of which are works in progress, revealing the detail and effort that go into their work.







A close-up look at the hand-painted motifs decorating the prow of a wooden ship model

(Opposite page) Lam Wai Kao (left) and Tam Kam Kwong are determined to continue teaching and promoting the art of wooden ship model making at the Shipyard Workers Association in Coloane Village

It can take about three months to complete a medium-sized model that's about 1 metre in length if two people work together on it every day. "Some people even need a longer time," says Lam.

Tam and Lam use many types of equipment and materials to create their models, from traditional wood to costly modern cutting and sharpening machinery.

In the past, local shipbuilders used to make full-scale wooden ships using Borneo ironwood, teak, intsia and camphor woods. Lam and Tam still use ironwood and teak, and have since added beech wood, to make the miniatures - all imported from Sandakan in Malaysia and the Indonesian part of Borneo.

Making each model can cost anywhere from a few hundred to several thousand patacas depending on the size. In the past, Lam and Tam have sold models for up to MOP 10,000, but they very rarely found buyers. That's why Lam counts it as a hobby and often gifts his creations to other people or organisations like Shenzhen University as souvenirs, or keeps them on display at the association.

ALL HANDS ON DECK

Over the last 160 years, the association itself has played a key role in keeping the shipbuilding tradition alive and celebrating Macao's maritime heritage. Established in 1854 as an informal group of workers and employers in Macao's shipbuilding and repairing industry, the association originally provided a place for shipyard workers to discuss work and socialise.

However, it wasn't officially registered until April 1980, when the group established a framework of labour rights for workers in the trade. In the decades following, the association became very active in defending its members' rights.

計單程號 RUA DO CAETANO

現在入水車

Since the turn of the century, the association has mainly focused on promoting love for "the country and Macao" by hosting cultural and recreational activities and promoting the arts, such as model boat craftsmanship. But today,

they do so.

0



membership numbers are dwindling as former shipbuilders pass away, making it simultaneously harder to pass on traditions and more imperative that

Tam, who has been a member of the association for more than 30 years, including as president over the last six years, says membership numbers have shrunk by half from 1,000 to about 500 in the past two decades. "Maybe only 10 of us still make ship models," he notes.



Lam Wai Kao carefully measures out the design for one of his wooden model ships

(Opposite page) Lam Wai Kao and Tam Kam Kwong display their wooden ship models at the Shipyard Workers Association of Macao headquarters "Our youngest members – the last batch of shipyard workers who joined the industry – are all over the age of 60. We do not have younger members because there's no more shipbuilding industry in Macao," he adds.

Even so, interest in the craft – at least in reproducing miniature models of old junk boats and sailing ships – still exists. But the association's small headquarters, located in a building built in the late 1960s, poses a different problem.

"We don't have enough space to accommodate the students," he says. "We hope the government will provide us with more space," a level of support that many Macao associations receive.

At present, the association has three students – all in their 30s and 40s – learning the craft at the headquarters. But they have a few rules: "The students cannot be too young or too old", and they must have insurance before they can join, according to Lam. There's a good reason for both policies. "Our place is not big enough, so some of the machines and equipment that we use can pose some danger to people, like when we cut the wood. If they're too young, they're not mature enough, and above 50 years old is too old [to start learning] to do this craft," he says.

"It's harder to make models than real, big [ships]. You can have about 20 to 30 people working on a big ship at the same time, while usually only two people make one ship model together," Lam explains.

"This hobby can be quite expensive, too," he adds. In some cases, such as for competitions, some will even spend tens of thousands of patacas on their models. That is why Lam teaches the skill for free – students only need to bring their own materials. "The only thing I ask is for them to keep doing this tradition and pass on the ship modelmaking techniques. I want more people to know about it," he says. "I don't want it to disappear." Whenever they can, Lam and Tam join competitions in the mainland, too. Despite pandemic restrictions, they managed to join the 2020 Shenzhen Scale Model Competition. The duo won third place, but the top three all came from Macao – including the winner, 41-year-old Guangzhou native Sam Chen, who is one of their three students.

Chen moved to Macao in 2009 to work for a company that makes car models, Sun Star Models. Almost immediately, he learned of the Shipyard Workers Association of Macao and came under the tutelage of Tam and Lam, channelling his lifelong obsession with ships. "Making different kinds of models has been my hobby since I was a kid," he says.

"It is harder to make wooden ship models than car models because you must have some knowledge and skills in woodcraft. That's why this art is important, and if we don't pass it down to the next generations it will disappear and it would be such a pity if it comes to that," says Chen.

Lam, of course, agrees. Currently, he's trying to generate interest in the craft among his two grandsons, aged 1 and 4.

"They both love playing with the ship models, and the older one, especially, always asks so many questions about ships. But they are too small so I cannot teach them yet," he says. No matter. Lam will wait until they reach an appropriate age and, even if they never want to learn from him, he'll keep doing what he has always done.

"I will continue to make ship models until I can no longer do it," he declares.



Candy crush

In the St Lazarus district, Yau Kei Candy keeps the fading, centuries-old tradition of making dragon beard candy alive.

MACAU

题名

選辦中西

穗果

甜點

送禮佳品

歡迎內進

Text Inara Sim Photos courtesy of Yau Kei Candy

Yau Kei Candy has been selling its signature dragon beard candy in Macao since 1986

renny Yuen stands in a temperature-Controlled room inside Yau Kei Candy shop, holding a giant ring of hardened, malleable malt sugar dusted in a thick layer of cornstarch. Slowly, Yuen starts to pull at this ring. He twists the sugar into a figure eight, loops the candy back and around, and then repeats the movement. The ring becomes two, then four, eight, 16, 32. After 15 minutes of doing this, Yuen gives it a final pull, and suddenly he holds over 16,000 strands of sugary silk in the shape of a 'dragon's beard' in his hand. He takes these filament-thin strands and wraps them around a sweet filling made from peanuts, sesame and coconut, and the circle is closed.



"I usually spend all day making the candy," says Yuen. "It can be hard on the hands, but I've been doing it for 12 years now, so it's all just muscle memory."

The 40-year-old candy maker is one of the last in Macao still creating the sweet treat the oldfashioned way. It's a life he never envisioned for himself. But he can thank his father, Yuen Tin Yau, for not just igniting his interest in the traditional craft, but also for keeping the ancient art alive today.

THE TALE OF THE DRAGON

A silky confection once enjoyed only by the ruling elite, thanks to its time-consuming preparation, dragon beard candy is said to have originated in China during the Han dynasty, although the legend surrounding its creation is as wispy as the candy itself. Some say that an imperial court chef created the sweet treat for the emperor; the small sticky strands clung to his face after he ate it, and so he christened it 'dragon beard' candy. Others believe the candy was simply named after the mythical dragon the symbol of the Chinese emperor.





Yuen Tin Yau, founder of Yau Kei Candy, tells a different story. "The original name was 'silver thread candy," he says. "The emperor liked the candy so much, and as his zodiac sign was the dragon, he renamed it dragon beard candy."

The sweet eventually escaped the confines of the Forbidden City and made its way into the public domain. For decades, the secrets of the candy-making process were passed down orally, and vendors sold it on street corners throughout the country. But when the Chinese Cultural Revolution attempted to eradicate any connection with the country's imperial past, the tradition nearly disappeared. It wasn't until 1976, when the revolution came to an end, that the candy started to make a slow but noticeable comeback.

At the time, Yuen Tin Yau, who was born in Macao in 1947, was living in Hong Kong, where he had relocated with his family in the 1970s. "The manufacturing industry in Hong Kong was declining and my housemate and fellow apprentice and I were eager to change jobs," he explains. "One day, he told me that he had got a recipe for making dragon beard candy and I asked him if he could teach me as well. But he told me that he would make the candy and I could sell them."

So rare and treasured were the secrets of dragon beard candy that Yuen Tin Yau's housemate refused to share his recipe and candymaking techniques. He would only make the candy when Yuen Tin Yau was out and even tore the labels off product packaging so he couldn't replicate the recipe. But his housemate's efforts were no match for Yuen Tin Yau's curiosity.

"I collected all those scraps of paper and tried to piece together what he was using," he says. "I finally figured out the ingredients [corn syrup, shredded coconut, peanuts and sesame] and tried to make my own candy. It gave me blisters all over my hands, because I had no idea what I was doing."

Even with a straightforward recipe in hand, it took time for Yuen Tin Yau to figure out the process. He had to pour molten malt-sugar syrup, heated to a scalding 171 degrees Celsius, into containers and let them cool overnight before he could start pulling them into strands. It took him months to learn the process and years to perfect it. In 1976, then 28 years old, Yuen Tin Yau moved in with his older brother and started running a dragon beard candy hawker stall in Tsuen Wan. "I actually bumped into my old housemate one day and he invited me to start a business with him," says Yau. "But I was already selling my own candy by then and didn't need to go into partnership

with him."



(Opposite page) Kenny Yuen (left) and his father Yuen Tin Yau make the iconic candy by hand; (Bottom) A limited edition treat, this durian-flavoured dragon beard candy was only available this summer

Father and son stand outside the Yau Kei Candy shop on Rua de São Roque



After selling his candy in Hong Kong for 10 years, Yuen Tin Yau returned to Macao in 1986 to try his luck here. He set up shop outside Theatre Alegria in the St Anthony district. "It became unexpectedly popular. Business was steady and everyone here grew to love the candy very much," he says. "The process is quite theatrical to watch, and then the way it just dissolves in the mouth is almost magical."

Copycat stalls began to pop up around town, but Yuen Tin Yau says they had all disappeared by the end of the decade. "Nobody wanted to take over the businesses," he explains. "Without someone to learn the trade and keep things going, they had to shut down." Yuen Tin Yau nearly suffered the same fate.

KEEPING TRADITIONS ALIVE

Nearing retirement, the ageing candy maker could feel the years catching up with him - the repetitive movements, the strain on his body. He started receiving cortisone injections in his hands to manage the pain. When he turned 65 years old, he finally pleaded with his son Kenny to take over the family business.

"I was in the UK studying biology when my father asked me to take over," says the younger Yuen. "I didn't want to do it. But I asked my friends what they thought, and they said if I didn't do it then there would be no more dragon beard candy in Macao, and it will be lost forever once my father retires."

Yuen agreed to a one-year trial. In 2010, he returned to Macao to

learn the tricks of the trade from his father. "It's easy to say you'll give it a go and see, but once you pick it up, it's difficult to stop," he says with a laugh.

Despite spending his whole childhood watching his father perform the intricate movements to make the delicate candy. Yuen found it difficult to produce it properly with his own hands. That's because he was trying to mimic Yuen Tin Yau's movements. "He told me that I had to learn my own way to make the candy," says Yuen. "Once I started using my own style to make it, it became a lot easier to perfect."

His efforts have not gone unnoticed. The peanut-filled candy was added to the Macao government's Inventory of Intangible Cultural Heritage in 2020, and now some of Macao's hotels offer it as an in-room treat for their guests. Even if the candy evolves with the times - new fillings, new packaging, new production facilities - the recognition from the government should provide on-going protection of the centuriesold tradition.

And Yuen makes it clear that those changes are occurring.

"We have some new flavours now like durian, tofu, chocolate ice cream, plum, and lychee tea," he says. "It brings a creative and modern element to the candy that will keep it relevant."

New technology has helped extend its lifespan, too. Sensitive to temperature and moisture, the treat that Yuen Tin Yau once hawked on the streets of Hong Kong and Macao had to be consumed immediately or else it would melt. Now, Yuen makes the candy inside a temperature-controlled room at the company's brick-andmortar shop in the St Lazarus district.

"Now we don't have to worry about the weather affecting our candy," says Yuen. "My father still talks about a day

in Hong Kong when they were hit by a sudden hail storm and none of the dragon beard candy makers could pull the candy - the unpredictable weather just made it impossible." That leaves Yuen with time to find others to carry the torch in the future. In an effort to get ahead of the ball, he runs workshops on the upper level of the shop to teach others how to make the candy and, he hopes, generate interest in the craft. He might not have to look far to find someone to keep dragon beard candy alive for the next generation, though. His son, 10, has already declared that he will one day take over the candy empire. "We'll see!" Yuen says with a laugh. "I won't put any pressure on him.".

(Opposite page) Yau Kei Candy offers its more shelf-stable varieties, good for three months, in boxes of six

Once a closely guarded secret, you can now learn the art of making dragon beard candy from Kenny Yuen







IPIM's 'One-stop' business services help Macao enterprises realise their dreams

From setting up a new enterprise to connecting companies with overseas partners, the Macao Trade and Investment Promotion Institute (IPIM) offers a comprehensive suite of business services to expedite the growth of local brands.



Text Cathy Lai

IPIM helped Hugo Lo realise his vision of a cosy, youthful café on the historic Rua das Estalagens

T T ugo Lo has always been passionate about coffee thanks to his father, who runs a coffee and food product company. When he turned 23 last year, Lo realised he was ready to turn that passion into a business.

Lo rented a 700-square-foot shop on the historical Rua das Estalagens near the Ruins of St Paul's, and set up Chaa Caffeine & Treats. Modern, inviting and creative, the photogenic café sells specialty coffee and matcha, as well as memorable desserts like "croffles" - a cross between croissants and waffles.

As a first-time restaurateur, Lo encountered many challenges while setting up Chaa. From applying for a restaurant licence to interior design decisions and fire safety measures, one single mistake could have delayed the opening and increased costs.



Luckily, he knew where to seek support. Learning from his father's experience, Lo turned to the Investor's "One-stop Service" provided by the Macao Trade and Investment Promotion Institute (IPIM), a government department that strives to promote trade relations, attract foreign investment and diversify Macao's economy.

"Through its One-stop Service, IPIM provides a full range of support to help aspiring entrepreneurs realise their dreams, from setting up a business to expanding networks to facilitating cooperation," says Lo. "Thanks to this service, I have not only enjoyed a smooth launch of my café, but also received valuable insight and guidance for expanding my business."

A ONE-STOP SERVICE FOR ALL

Provided by IPIM's Investment Promotion Division, the free-to-use One-stop Service offers investors and entrepreneurs support throughout the business implementation process. In the first five months of 2022, the programme has supported more than 102 local enterprises across various sectors, from food and beverage services to finance, technology, tourism and entertainment. These programmes have created over 270 employment opportunities and brought a total of MOP 98 million of investment into the city.

Just like many new businesses in the city, Chaa benefited greatly from IPIM's support. According to Lo, the institute provided personal services to guide him through the cafe's set-up and launch plan. Step by step, they provided comprehensive guidance on everything from checking the kitchen layout to fire safety and hygiene standards. IPIM also answered questions about administrative procedures related to licence applications and company registration.



"IPIM consultants made sure we did everything right with the applications, checking the documents before submitting them to relevant departments for approval," says Lo, adding that IPIM even followed up on the feedback from the departments and shared advice on next steps.

"Because IPIM has a great network with every department related to restaurant licence applications, they could always get the most precise answer to every question we asked," Lo says. "This saved us a lot of time and the agony of reaching out to different departments for answers."

IPIM staff members also helped in the final stages of the restaurant licensing process. After six months of renovations, Lo had transformed an empty space into a cosy, youthful café where vibrant green accents liven up a contemporary cream palette. With a kitchen area of around 200 square feet and a dining area of about 500 square feet, the café can host around up to 20 guests at a time. When the renovations were complete, IPIM informed the Municipal Affairs Bureau and encouraged them to conduct a final check before approving the restaurant licence.

Chaa officially opened its doors in January this year, and has quickly become a popular gathering place among young people, who enjoy relaxing at the café over the creative dishes and drinks.

Thanks to a strong start for Chaa, Lo is already feeling ready to take his business to the next level. He has joined several business networking and sharing events hosted by IPIM, where he had the opportunity to learn how experienced business

owners promote and expand their companies. What's more, Lo plans to exhibit Chaa café at the Macao International Trade and Investment Fair (MIF) in 2023. Hosted by IPIM, the annual exhibition - which is one of the city's most reputable international economic and trade events - aims to promote networking, cooperation, and exchange between businesses from the mainland, Hong Kong and Macao.

Last year, the event brought together 920 on-site exhibitors and 1,100 online exhibitors from the mainland, Portugal, Hong Kong, Macao and more, covering industries such as big health, scientific and technological innovation, franchising, and food and catering.

Lo is confident that MIF can help Chaa achieve its expansion goals. "We plan to bring Chaa Caffeine & Treats to the Greater Bay Area, mainly in Tier 1 cities, such as Guangzhou, so that it can reach more young people," he says. "MIF is the perfect occasion for Chaa to meet potential business partners in the region."

GROWING BEYOND MACAO

While Chaa is awaiting opportunities to expand abroad, local eco-tech company Hylé Design has been collaborating with companies outside Macao for the past five years, thanks to IPIM's business matching service.

A pioneer of circular design solutions, Hylé Design has developed several sustainable innovations. In 2016, the company pioneered CROZ, a wood-encased digital camera made from used wooden furniture. This year,

Hylé Design launched Chazence, a trailblazing subsidiary that transforms used tea leaves into everyday essentials, such as takeaway containers, mobile phone cases, diffusers, furniture, and more. The company not only owns three patented technologies to upcycle tea leaves into various products, but is already working with major companies in the mainland to showcase the possibilities. According to Wingsley Chan, marketing manager of Hylé Design, IPIM's business-matching service has helped the company expand and evolve since 2018. The service aims to support Macao enterprises grow

internationally by helping them find viable business partners and explore overseas markets.



(Opposite page) Hugo Lo credits IPIM's One-stop Services for the smooth launch of his new café

Incorporating used wooden furniture into a digital camera is just one example Hylé Design's circular design innovations







Chazence makes everything from mooncake boxes to bags to utensils from recycled tea leaves

(Opposite page) Calvin Sio, founder of Hylé Design, praises IPIM's ability to help companies like his connect with overseas brands and new markets

In 2021 alone, the platform facilitated 2,906 business matching opportunities (including 742 over the 'cloud'); and 2,834 opportunities at economic and trade events such as the MIF and the Guangdong & Macao Branded Products Fair, with 982 buyers attending. They also arranged 72 out of 83 daily business matchings, serving 113 enterprises. These connections covered a wide range of industries, including food and beverage, traditional Chinese medicine, logistics and environmental protection.

In addition to offering businessmatching support, IPIM also invited Hylé Design to display its CROZ digital camera in 2018 and 2019 as part of "Macao Ideas", a permanent exhibition promoting Macao brands and products to local and foreign buyers, partners, and investors.

Since its launch in 2011, Macao Ideas has exhibited more than 1,800 products

from over 170 Macao companies, including food, coffee beans, wine, healthcare products, clothes, shoes, jewellery, skincare products, cultural and creative design products, and handicrafts.

According to Chan, the exhibition has opened many doors for Hylé Design. "It helped us attract and connect with many brands and enterprises in Macao, such as Noble Mart Macau, MGM Macau and Sands China. This has led to opportunities to sell our products at the pop-up stores at some of these venues," says Chan.

When Hylé Design started developing Chazence in 2018, the company saw an opportunity to expand beyond Macao. "We were hoping to work with HEYTEA [one of China's most popular tea shops], because it can supply a large amount of tea waste at one time," says Calvin Sio, founder of Hylé Design. "However, as a

startup in its early days, we had no idea how to get in touch with them."

IPIM opened the door. That year, IPIM shared Hylé Design's proposal with HEYTEA and encouraged the company to contact Hylé Design for further discussion. And that's exactly what HEYTEA did. Since then, Hylé Design has held several meetings with HEYTEA to provide updates on its upcycling technology and present new products made of tea waste.

After 1.5 years of discussions, Hylé Design and HEYTEA officially formed a partnership in 2019. Hylé Design set out to produce 1,000 limited-edition teacups using its patented, biodegradable tea fibres for the HEYTEA featuring designs by Japanese fashion label Fragment. Launched this April, the multi-functional matte-black cups, designed by Japanese fashion label Fragment, consist of two layers: an inner

tea cup and a spherical "ball cup" which doubles as an incense diffuser. Sio says that the company has matured significantly by collaborating with HEYTEA. "To make sure that we were qualified to be its supplier, HEYTEA has arranged specialists to help us optimise our hardware facilities, such as offices and showrooms," he says. "This has helped us lay a good foundation for working with other big brands in the mainland."

Looking back to the beginning, Sio says the collaboration wouldn't have been possible without IPIM's facilitation. "Many startup companies in Macao want to take their business abroad, but they may not have the resources to do so. With a strong network locally and internationally, IPIM plays an important role in bridging local startups with overseas brands, helping them pave a way into new markets."

How prepared is Macao for an electric-powered future?

Electric vehicles are increasingly appearing on Macao's streets, but is the city ready for an EV takeover?



Text Cathy Lai

The falcon-doors found on some Tesla models may look futuristic, but they actually date back to the mid-1900s

This April, hoping to cut fuel **I** and maintenance costs, casino employee Rex Chiu bought a Tesla Model Y. So far, the 34-year-old is happy with his choice.

On a normal day, he says he drives one to two hours in total, and he typically only has to charge his car after five days of use. Since his company has set up around 15 charging spaces in its car park, Chiu can do that while he's at work. Conveniently, he says it takes six hours to fully charge the battery nearly a full work day.

The money he once spent on fuel has dropped significantly, too. Before he bought an EV, he used to pay more than MOP 2,000 for fuel per month. With the introduction of EV charging fees in late July, costing consumers MOP 1.4 to MOP 4.4 per kilowatt, Chiu estimates that he needs to pay around MOP 1,000 per month to charge his car's battery.

Chiu is among many car owners who have turned to EVs in recent years. Like him, most have found that EVs offer more positives than negatives. That has driven surging demand in the budding market sector. According to the International Energy Agency, an intergovernmental organisation that helps shape energy policies, the number of electric cars on the roads worldwide was about 16.5 million by the end of 2021, triple the amount on the roads in 2018. In the mainland alone, electric car sales nearly tripled in 2021 to 3.3 million,



accounting for about half of the global total.

Macao has also seen an uptick in demand for EVs. According to government statistics, the total number of EVs in the city has tripled since 2020. As of 30 April 2022, the city is home to 3,150 EVs, including 2,184 light vehicles, 457 heavy vehicles and 509 electric motorbikes.

As Macao embarks on a greener future, local leaders and consumers alike are looking to EVs. While some snags remain, including infrastructure that has not yet caught up to demand, EVs seem likely to reshape the city in the future. In many ways, the future is already here.



Gull-wing doors, also known as falcon-wing doors, evoke the image of a seagull's wings

(Opposite page) In September, EV giant BYD Auto opened a shop at Studio City in Cotai

A GREENER OPTION

EVs are good for the environment on multiple levels. Unlike conventional vehicles that use a gasoline- or dieselpowered engine, EVs do not spew greenhouse gases like carbon dioxide and methane or other air pollutants that contribute to smog, haze and health problems into the environment.

Scientists also have found that EVs produce less carbon dioxide than petrol cars in countries or regions with higher shares of clean energy. According to a study published by the University of Cambridge in 2020, EVs are better for the climate than conventional petrol cars in 95 per cent of the world, except for the most coalreliant countries, such as Poland. That's because when the electricity itself is powered by coal, charging becomes dirty as well.

In France, on the other hand, where the share of clean energy outranks natural resources like coal, renewables and nuclear power accounted for 19.1 per cent and 70 per cent of the country's energy mix in 2020, respectively. The average lifetime emissions from electric cars are up to 70 per cent lower than petrol cars in the country.

That is why EVs play into so many national strategies seeking to lower greenhouse gas emissions. That includes Macao. According to national targets, Macao is aiming to reduce its emissions more than 55 per cent from 2005 levels by 2025. To achieve this, the local government has launched various measures to facilitate a shift to EVs.

For instance, according to local regulations, those who purchase one of 24 approved eco-vehicle models that meet the environmental standards for gas emissions can enjoy a subsidy

that covers up to 50 per cent of the motor vehicle tax, with a deduction cap due at MOP 60,000. In addition, EV owners have been exempted from licence taxes since 2016.

Next year, the government will encourage all public services (including public buses and the integrated resorts' shuttle buses) to use EVs and require all car parks in private and commercial buildings to include electric charging points. By 2025, the government plans to power 90 per cent of the city's bus fleet with clean energy and increase the number of electric taxis, too.

EVs cut waste in other ways for consumers, too. "There is less maintenance for EVs. For instance. unlike petrol cars, EVs don't need regular oil changes since it works

on an electric motor," Chiu says. However, EVs can still have a

He also points out that regenerative braking systems typically used in EVs reduce brake wear because they capture energy the vehicle produces in motion and convert it into electricity. negative environmental impact. One of the main concerns lies in the production of lithium-based batteries, the most common battery type used in modern EVs. These batteries rely on raw materials like cobalt, lithium and rare earth elements. Mining cobalt, in particular, produces hazardous tailings (mine waste left after the target mineral is extracted) and slags (a by-product created when extracting metal during the smelting process) that can leach into the environment. Meanwhile, deposits of rare earth



elements often contain substances that can emit radioactive water and dust.

There are ways to reduce this impact, though. For instance, environmental advocates have urged for further studies to accelerate battery reuse. Meanwhile, pilot projects in Germany and the United Kingdom have extracted lithium more sustainably by filtering it through hot brines (which form naturally due to the evaporation of saline groundwater) beneath granite rock. The technology allows over 98 per cent of the brine water to be recycled back and alleviates concerns about depleting water supplies for nearby people.

Despite the potential pitfalls, Hongcai Zhang, assistant professor in the Department of Electrical and Computer Engineering at the University of Macau, believes that EVs are a much greener option for Macao than petrol cars in the long run, since they will be increasingly powered from electricity generated from renewable energy sources.

According to the National Energy Administration of China, the share of clean and renewable energy in China's electricity generation has almost doubled over the past decade, surging from 13 per cent in 2011 to 24.3 per cent in 2020. This bodes well for Macao.

"Developing solar and wind energy has become China's core energy strategy," he says. "EVs, which run on electricity, will see lower and lower well-to-wheel emissions [all emissions related to fuel production, processing, distribution and use] in the future. As Macao depends a lot on the electricity supply by the mainland, EVs in the city will also benefit from this trend."

MORE BRANDS JOINING THE MARKETS

Macao is uniquely suited for EVs

"For many families, it would

small city like Macao."

attraction, says Donovan

gas cars, thanks to the instant power

have faster top-end speeds and can

sustain them for longer). He adds that

many EV owners enjoy being able to

monitor the car's overall condition,

built-in touchscreen dashboards.

According to Leong, since it entered the Macao market in 2016,

Tesla has quickly become the most

popular EV brand in the city. "First of all, Tesla provides right-hand

drive models (such as Model Y and

Model 3), which are more suitable for

Macao drivers. Besides, it is [one of] the earliest EV brands that entered

Macao markets and most chargers in

local car parks are compatible with its

to provide sales and maintenance

75 minutes to fully charge batteries.

services. The centre set up four superchargers, which take around

The brand also launched a service centre at Studio City in the same year

vehicles," he says.

such as its battery and range, on their

generated by an electric motor

(although gas-powered cars still

be enough to charge their EVs

Zhang. "EVs are perfect for a

performance of EVs is a big

one or two times a week," says

For gearheads, the overall

due to its size. In a 2021 research



Hongcai Zhang

(Opposite page) The Tesla Model S, first unveiled in 2009, remains a premier sedan for luxury and performance

Some of the most popular models from Tesla in Macao include Model Y and Model 3, priced at about MOP 341,100 and MOP 375,100 respectively.

Leong has also noticed more and more mainland brands entering the market in the past three years. BYD Auto, the fourth largest plugin electric vehicle company in the world, opened a service centre on Rua de Francisco Xavier Pereira in 2021 and launched ATTO 3. a standard A-class SUV priced at MOP 378,700, this April. BYD also provided the city's first fleet of electric taxis in 2018. Automobile manufacturer Nio. meanwhile. opened one-stop service centres at Lisboeta Macau and Rua Dos Pescadores in April 2022.

Long-standing global brands have also entered the marketplace. Since German automaker BMW introduced its all-electric iX3 model to Macao in 2013, many major players have upped their EV offerings in Macao, too, including BMW subsidiary MINI and Japanese giant Toyota.

A BETTER CHARGING SYSTEM NEEDED

As both supply and demand for EVs continue to grow, Leong believes it's time for the city to up its game. For starters, he believes Macao needs to optimise its EV charging systems.

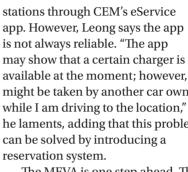
The city currently has 200 charging spaces across 42 public car parks and seven streets, according to the Macau Electricity Company (CEM), Macao's sole energy service provider. While most integrated hotels in the city provide EV charging spaces in their car parks,

they are typically reserved for guests and team members.

EV car owners can request CEM to install charging points in residential areas, but they could face obstacles, such as opposition from building management authorities and limited voltage capacities in the buildings themselves. As a result, only 130 private charging stations have been installed in Macao over the past five years.

Leong has asked the government to help install charging stations in more public spaces and even help residents install them in private car parks. He has also suggested setting up charging stations specifically for commercial vehicles such as taxis so that the public won't have to compete with commercial vehicles for chargers.

At the moment, EV users can check the availability of charging



The MEVA is one step ahead. The organisation is currently working with IT experts to develop an app for reserving charging spaces. It plans to conduct a trial run in two parking lots - one at a shopping mall and one inside a residential building – within the next year.

compete for charging space based the reservation system will help them make better arrangements with their time and schedules,"



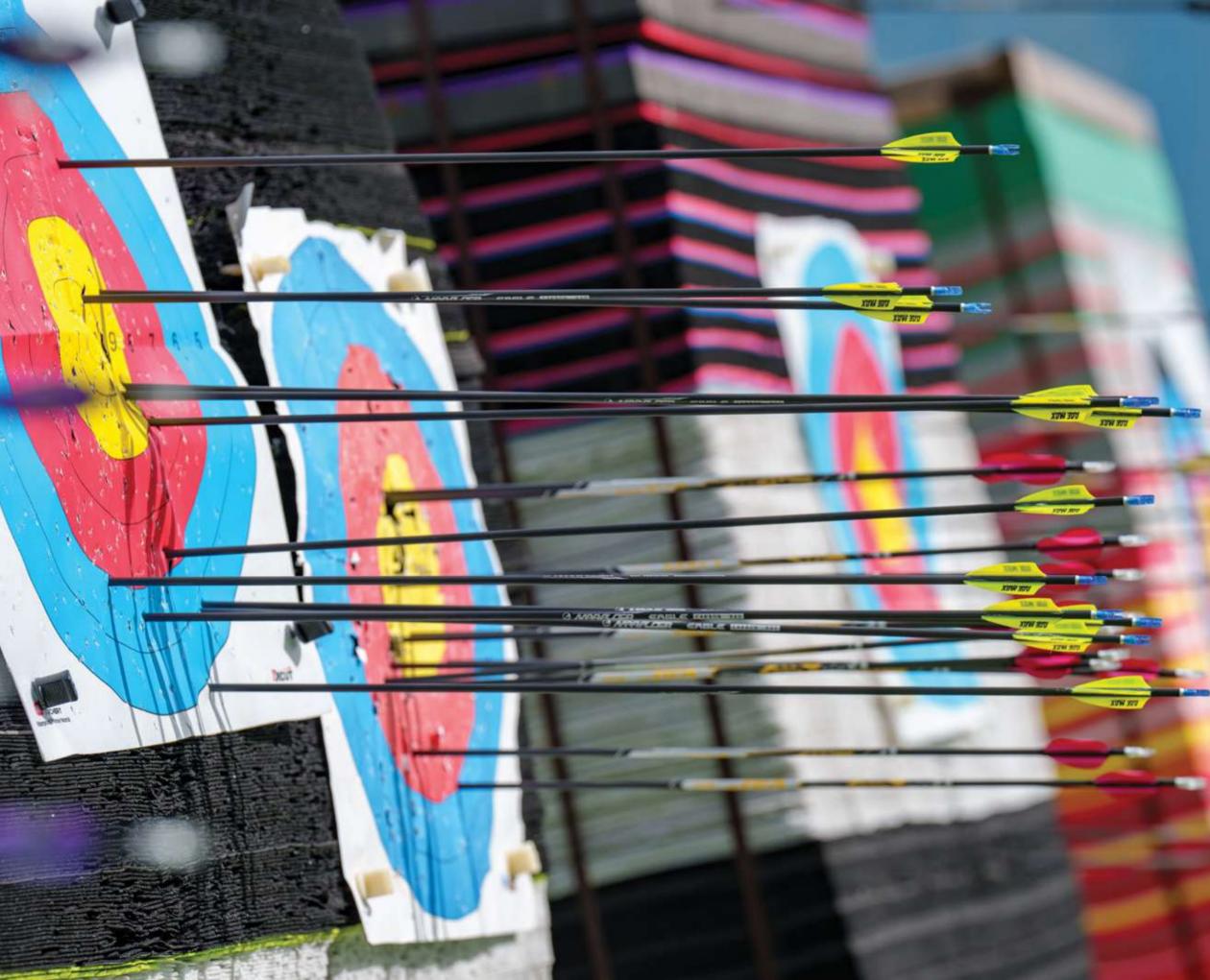
available at the moment; however, it might be taken by another car owner he laments, adding that this problem

"Instead of letting car owners on a first-come, first-served system,

he explains. "As a result, this will maximise the use of each charging station, making it possible for them to serve a larger number of EVs in a day."

EV advocate Leong believes that with a better charging system and bigger availability of charging spaces, more Macao residents will be motivated to shift to an electricpowered future. But he realises there is much work to be done. Like many other scientists and EV advocates, he believes we must find a way to reduce the environmental impact of lithium batteries - perhaps by promoting the reuse or recycling of the batteries, or by finding a green solution to lithium mining.

Challenges like these lie on the road ahead for Macao. With continued progress in the EV and energy industries, the city could be seeing green soon.



SPORTS

Aiming for a **bullseye**

75

The Macau Archery Association has been around for close to 30 years. Now with about 250 registered athletes, the association is targeting growth like never before.





Text **Erico Dias** Photos **Lei Heong Ieong**

Former chairman of the Macau Archery Association, U Sio On, continues to practice the sport

(Opposite page) The University of Macau range allows AAFM members to practice shooting at ranges up to 70 metres A rchery is one of the world's oldest sports. It was even an official sport in the 1900 Olympic Games. But somehow it never made a dent in Macao until the 1990s, after a Macao local named U Sio On went looking for a sport that was "unique but not too strenuous."

U worked at the Conde São Januário Hospital at the time. "I asked one of my colleagues, António Fernandes [chairman of the Macau-China Paralympic Committee & Macau-China Recreation and Sports Association for the Disabled] who worked in the physiotherapy department, and he told me that archery is a great sport for physiotherapy [thoracic spine mobility in particular] and agreed to join me," U explains.

By 1993, U had rounded up a few colleagues to practise archery with him,

and the Macau Archery Association, also known as Associação de Arco e Flecha de Macau (AAFM), was born.

It certainly made for an unusual beginning for a sporting association. But the AAFM members were allin, and their dedication to growing the sport has paid dividends. Today, their group has grown to nearly 250 registered athletes. And if U's successors hit their targets, the sport will continue to attract more young athletes in Macao.

SHOOTING FOR THE STARS

A year after starting their association, U began formulating a plan to grow the sport in Macao and contacted the Hong Kong Archery Association (HKAA) for assistance. He and Fernandes travelled to Hong Kong to join some of their classes. After they sharpened their skills, U and his colleagues officially established AAFM with the Sports Bureau in 1995 and a year later the association was registered with the Federation Internationale de Tir a l'Arc (FITA), now known as The World Archery Federation.

"It was so challenging to set up AAFM at the beginning. There was no space or equipment in Macao, it lacked everything," U says.

Even now, the association still struggles to find venues to practise or compete. They have moved practice ranges several times, from a police shooting range in Coloane to open land next to the Olympic Sports Centre, then a spot near Macao Sam Yuk Middle School and an industrial building near the School of the Nations. Today, they use two fields: a residential area in Hac Sa Wan for 8-metre, short-distance training and physical exercises, and the University of Macau (UM), where they joined in 2016, to practise shooting at targets 30, 50 and 70 metres away.

While the practice range in Hac Sa Wan is available regularly, as it was provided by the current association president, the university grounds are not always open for use. Still, the group makes do with what they have. "Even this place at UM was not easy to fight for, but we have to be fortunate and grateful to have these two practice ranges after moving many times in the last two decades," U says.

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Ken Fan was originally drawn to the sport when he saw an AAFM archer's "cool" recurve bow

(Opposite page) Fan dominated local recurve competitions for years before switching to a less-demanding compound bow

APPRENTICE TAKES CHARGE

In 2017, U decided the association needed fresh energy and ideas, and so he hand-picked one of his students, Ken Fan, to take over as chairman.

Born in Macao in 1970, Fan recalls when he first saw one of the AAFM archers' modern recurve bows - a type of bow that, when released, curves away from the archer and gives it power, speed and accuracy - a lookalike to Hawkeye's bow in Captain America: Civil War.

A bow and arrow that "looked cool" was all it took to hook him.

"It was like you're playing with your first toy car and you're amazed by its features," Fan explains. "So I bought a full modern bow set from Dr U. which cost about MOP 7,000, and joined the

association. It was a bit expensive at the time, but it gave you confidence in the field and made you feel like a pro."

U looked to Fan to carry on the archery legacy. He has not disappointed. "Ken was enthusiastic about archery and he's hard-working," U says. "At first, he couldn't manage to spend too much time on AAFM because he was busy with work [with Air Macau at the time], but he has done a lot for us since 2000."

Fan has worked hard to develop the sport and association, often playing a handson role. About 90 per cent of the archers at the AAFM today are Fan's students. Under his leadership, the coaches at AAFM have continued to work closely with youth and adults in the sport, offering individual lessons and introductory workshops open to most ages, starting from age six.

FAN KE

Through the years, the association has also promoted the sport with the help of different media channels, from articles in newspapers to AAFM Facebook live streams. Every time there's an international archery tournament in Macao, TDM (Teledifusão de Macau) televises it, and Fan commentates in Cantonese for local citizens.

According to Fan, attracting people to archery hasn't been difficult; making them stay is the problem. Throughout the year, the association hosts basic training open courses for individuals interested in the sport. "[We put it] up on our Facebook page, and every time we set a date for the course, the enrollment is full within an hour," Fan says, but he also adds that aspiring archers get pulled away from the sport just as quickly, whether it's because they dislike standing in the heat for up to eight hours during events or life gets in the way.

"Since the start of the pandemic we've had at least 50 members joining the association, which is a lot," Fan explains. "Generally, 90 per cent of the people who finish the courses will join our association, but only 10 per cent will continue regular practice after a year."

Archery is also a long game, and it can take years to climb the ranks. But the AAFM caters to all abilities. The group hosts four seasonal competitions annually for different skill levels: beginner, primary, intermediate and advanced. The competitions offer local athletes a path for growth, as between each competition, especially for the higher levels, the archers must build up skill and strength to improve their scores.

Archers tend to move quickly from beginner to intermediate level. To do that, you need a score of 560 in two rounds at 30 and 50 metres. But reaching the advanced (highest) level is much harder. "Archers must achieve a score of 540 during an official 70-metre two-round," Fan explains.

Still, the AAFM helps aspiring athletes go as far as they want in the sport. The group has an archery award badge scheme that rewards athletes for achieving a certain score standard, not unlike taekwondo or karate belt colours.

LEARNING FROM THE BEST

As a leader for the AAFM, Fan is able to draw on his own experience. Over time, he developed into one of Macao's top archers in the recurve bow category. He credits a lot of his success to the lessons he learned from U. his own mentor.



While many young archers today learn new tricks from the internet, when Fan started, he learned from books or lessons from his coaches, especially U, who trained him when he joined the club. He digested every word U said, especially when it came to mentality - the most important skill needed to excel in the sport, according to U. Then he would apply those lessons to tournaments, which helped him calm his nerves. "You know, as archers, we want to be steady and consistent. But when you're in a competition and you lack experience, you end up getting nervous and you just can't shoot. Your whole body is shaking," he says. To make it even worse, during the competition a clock is present in front of you, as you have to shoot three arrows in two minutes, or six arrows in four minutes.





His classes with U paid off, though. U taught him to keep a timer in his head, ignore the clock and shoot whenever he was ready. Today, Fan teaches the same lessons to athletes who look up to him for guidance.

From 2000 to 2006, Fan won every local competition he entered. Even now, he wins, although not quite as frequently. Recurve competitions require a lot of physical strength, but 20 years of practice and competition made his left hand weak. On 21 March 2021, he entered his final recurve competition and walked away with a win. "It was a victory after quite a long time," Fan says.

"I decided to ... shift to a compound bow [shortly before this event], so I was happy I managed to win my last recurve competition."

NEXT-GEN ARCHERS

The AAFM has nurtured many talents since its establishment. Two archers that have stood out in recent years are Phila Lei and Tam Chi Chong.

Lei, 32, never expected to participate in sports, especially one with bows and arrows. In 2018, she came across an advertisement for an archery experience course held by the AAFM. "My first thought was this is a unique sport and something not so common in Macao. So why not give it a try?" she says.

At first, she lacked equipment, so some association members lent her their own. After a year with the association, her love for archery kept growing, and she decided it was time to invest in her own bow. "I realised when I put in more effort, the results got better and better and I felt content," she says. "Then I started to watch different competitions and was waiting to participate in [some myself]."

Lei finally did that in 2019 at the Macau Indoor Archery Open, organised by the Global Archery Alliance Macau. She claimed fourth place in Women's Recurve (18m). Then, she joined the 2019 Indoor Archery World Series Macau held at The Venetian Macao - her first go in the big leagues.

Having practised archery for only a year and a half, joining the competition was a huge challenge for Lei. Filled with nerves, she was extra careful with every little move she made so as to avoid mistakes.

"Luckily, I got my mentor [Fan] and teammates' encouragement and guidance," Lei says. "My overall performance was much better than I expected and the result was also unexpectedly good [coming in fourth place]."

She believes getting involved in these events had made her a better archer, if not a savvier person, too. "You won't win all the competitions, but at least you got yourself prepared and learned something and [improved]," she says.

On the other hand, Tam, 26, has been racking up competitions, mostly around the mainland and Macao. Now a graduate student at the University of Macau, Tam joined the AAFM in 2013, when he was still a teenager. Then he moved to Australia as an undergrad and discovered a different experience with the sport.

"What we have here [Macao] is like four lessons a week, and we learn every basic thing about archery, even the rules and safety," Tam says. "But in Australia, the class that I took is more like a fun trial, where after they taught you how to use a bow and arrow, you can do whatever you want in the range."

than just a sport."

Two years ago, after returning to Macao, he got serious about archery again. He set himself a personal goal of representing Macao's archery team. Tam contacted the AAFM on Facebook. Since he had already taken the group's introductory course (four lessons a month) in 2013, the group called him in to join them directly, and he has been practising since.

Back in Macao, Tam has found a mentor in the shooting range in Fan. "[He and my friends] teach and tell me what I'm doing right or wrong, and what I should be improving. We train together and help each other like supervised sessions," he explains. This sense of camaraderie is just one reason Fan believes archery can benefit everyone. No matter your age, weight or height, archery is for all, he says. It also offers a healthy release for daily pressures. For example, Lei works full time at the University of Macau as an administrative staff, while Tam has a year left to complete his masters degree in Public Administration, yet the two manage to squeeze in a few hours each week for the sport they love. "Here, you have this space to relax and let go of everything else," Fan says. "It's more

(Opposite page) Phila Lei credits her competition experience with making her a better archer: (Bottom) Tam Chi Chong hopes to someday represent Macao's archery team

AAFM members pose at the UM range, where the association hosts seasonal competitions





Z00M

Zhao Zhao: A Long Day

The Macao Museum of Art is displaying 82 pieces/sets of art from the Xinjiang-born artist, highlighted by some of his most important works over the past two decades.

Photos courtesy of **Cultural Affairs Bureau**

- ① Sky, 2021 (oil on canvas)
- ② Chinese artist Zhao Zhao presents his first solo exhibition in Macao
- ③ Constellations, 2019 (embroidery on tulle)

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m F}$ rom 26 August until 30 October, the Macao Museum of Art hosts the renowned Chinese multidisciplinary artist's first solo and large-scale exhibition in Macao: "Zhao Zhao: A Long Day".

The exhibition showcases 82 pieces/sets of his most important work from his young career - spanning from 2006 until now - including paintings, installations, sculptures and studies on ancient culture.

Born in Xinjiang in 1982, the Beijing-based Zhao Zhao graduated with a Bachelor of Fine Arts from the Xinjiang Institute of Arts in 2003. Since then, he has quickly risen in the ranks among China's new wave of contemporary artists, owing to his ambitious work that often challenges ideological structures, authoritarianism or conformity. A former assistant to Ai Weiwei, he has exhibited widely, including at



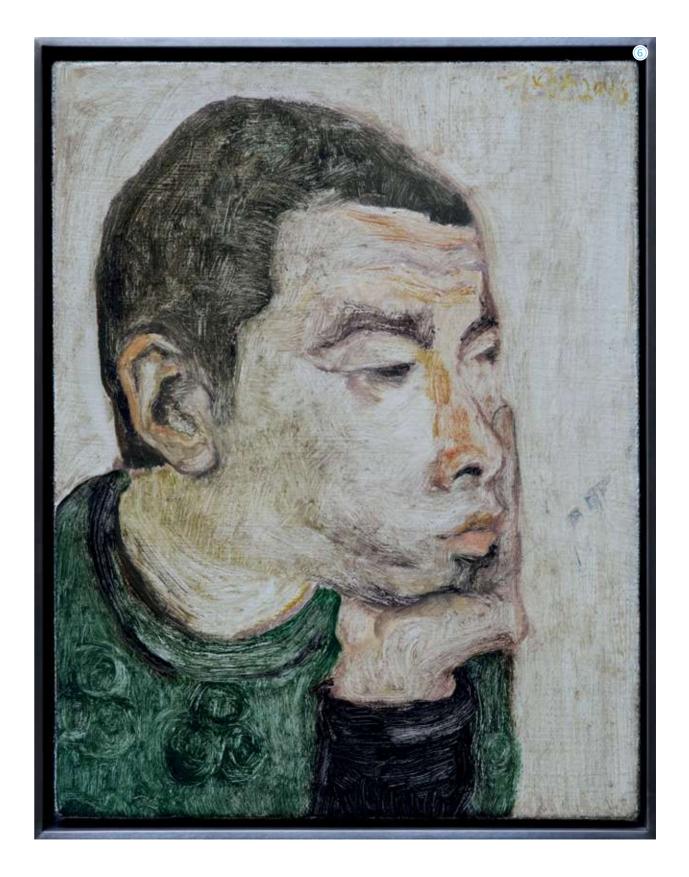


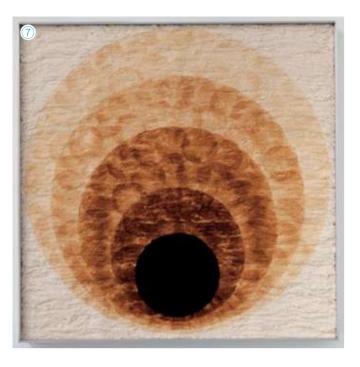
The Museum of Modern Art in New York, the Groninger Museum in The Netherlands, and the Padiglione D'Arte Contemporanea in Milan.



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- *Control*, 2019 (white marble)
- (5) Chinese Ladder, 2019 (white marble)
- 6 Self-Portrait, 2016 (oil on canvas)











- A Long Day, 2021 (mixed media, cotton)
- (8) Spread, 2022(mixed media, cotton)
- In Extremis, 2018 (brass, stainless steel, black iron, blue steel)
- 10 Jade Earbuds, 2020





- Zhao Zhao introduces his work during a vernissage held at the Macao Museum of Art on 16 September
- A series of artwork by Zhao Zhao at the Macao Museum of Art
- Various artworks are showcased in the "Zhao Zhao: A Long Day" exhibition





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