

Beneath the Bitumen 沥青

Discoveries from
the Chinese Cemetery,

之下

East Perth 东珀斯华人墓地的发现



National Trust
WESTERN AUSTRALIA

The National Trust of Western Australia acknowledges the Whadjuk Noongar people who are the Traditional Custodians of the land on which this excavation took place.

西澳大利亚国家信托基金会感谢 Whadjuk Noongar 族人，他们是进行这次挖掘的土地的传统监护人。



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Buried far from home



What was beneath the bitumen?



A rare find



Beneath the Bitumen installed at St Bartholomew's Church, East Perth Cemeteries.
“沥青之下”展览在东珀斯公墓的圣巴塞洛缪教堂举行。

The Chinese Cemetery in East Perth

The earliest burial grounds for the people of the Swan River Colony were east of Perth, in an area known by the Whadjuk Noongar people as Martellup. Initially a general cemetery, the land was gradually subdivided into 8 individual cemeteries based on the size of the communities they served. The Chinese community was the last to be assigned a burial place in 1888. Lot E69, on the western side of Plain Street adjacent to the Presbyterian Cemetery, was in use for ten years until the East Perth Cemeteries were closed.

The Perth Girl's School opened in 1936 on land next to the disused Presbyterian and Chinese Cemeteries. By the 1950s, the school was in need of more space and tennis courts were created over the former burial grounds. A few years later the school closed and the site was used by the Police Department as a vehicle licensing centre, the bitumen surface protecting the burials below.

The Government of Western Australia sold the site in 2018 to a private syndicate led by Australian Development Capital and Warburton Group. A condition of sale was the remediation of the site prior to redevelopment. Following consultation with the Chinese community it was agreed any human remains exhumed would be reinterred at Karrakatta Cemetery. Other artefacts uncovered during the excavations were to be transferred to the National Trust of Western Australia.



The East Perth Cemeteries in 1948 prior to the redevelopment of the Chinese, Presbyterian and Jewish Cemeteries.
1948 年，东珀斯公墓重建之前的华人、长老会和犹太公墓。

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东珀斯的华人公墓

天鹅河殖民地人民最早的墓地位于珀斯以东，该地区被 Whadjuk Noongar 人称为 Martellup。最初这是一个综合墓地，根据所服务的社区的规模，这片土地逐渐细分为八个独立的墓地。1888 年，华人社区是最后一个被分配到墓地的。位于普莱恩街西侧与长老会公墓相邻的 E69 地块在东珀斯公墓关闭前已使用了十年。

1936 年，在废弃的长老会和华人公墓旁边的土地上开办珀斯女子学校。到 20 世纪 50 年代，因为学校需要更多的空间，所以在原墓地的位置上建造了网球场。几年后，学校关闭，该地块被警察局用作车辆牌照中心，路面的沥青保护着底下的墓葬。

2018 年，西澳大利亚州政府将该地块出售给了一个由澳大利亚发展资本和沃伯顿集团为首的私人财团。出售条件是在重建之前要对该地块进行整修。在与华人社区协商后，双方同意将挖掘出的所有遗骸重新安葬在卡拉卡塔公墓。在挖掘过程中发现的其他文物将被转移到西澳大利亚国家信托基金会。



East Perth Cemeteries looking south in 2017. The bitumen surface that protected the former Chinese and Presbyterian Cemeteries is clearly visible across the road on the right. Next to it with the dark red roofs is the Perth Girl's School.
2017 年东珀斯墓地向南看。保护前华人和长老会墓地的沥青表面在右侧马路对面清晰可见。紧挨着暗红色屋顶的是珀斯女子学校。

The Chinese in Western Australia in the 19th century

Chow Moon, a boat builder, was the first Chinese person to settle in Western Australia in 1829. Another 51 Chinese people arrived as indentured labourers from Singapore in the mid-1840s. The next wave of Chinese migrants in the 1880s started businesses such as market gardens, grocery stores, tailors' shops and laundries while others worked as contract labourers and farm hands.

The 1891 Census coincided with the peak of Chinese migration to Western Australia and recorded 917 Chinese people in the state, making up 1.84 per cent of the population. Only 5 of those documented were female as women generally stayed in China to care for family. Men arrived as individuals or in small groups, intending to return home to their families after 2 or 3 years. For those who stayed longer there was a hope they would return to their ancestral home to die.

It is understood that about 40 Chinese burials took place in Perth in the 1890s. Mainly with the aid of death certificates, research to date has found the names of 26 individuals. The leading cause of death among the Chinese in the 1880-90s was tuberculosis followed by diarrhoea and dysentery, pneumonia and lung infections. These men were generally 20 to 40 years of age.

十九世纪的西澳大利亚华人

1829年，造船者周满是第一个在西澳大利亚定居的中国人。19世纪40年代中叶，另外51名中国人以契约劳工的身份从新加坡抵达西澳大利亚。19世纪80年代，第二波中国移民做起了商品果蔬园、杂货铺、裁缝店和洗衣房等生意，而其他则从事着合同劳工和农场工人的工作。

1891年的人口普查恰逢华人移民西澳的高峰期，据记载，当时该州有917名华人，占总人口的1.84%。记录在案的只有五名女性，因为女性通常留在中国照顾家人。男性以个人或小组的形式抵达，打算在两三年后回家与家人团聚。对于那些待得更长时间的人来说，他们也怀揣着能够落叶归根的希望。

据了解，19世纪90年代珀斯约有40个华人墓葬。迄今为止，研究主要依据死亡证明发现了26个人的姓名。19世纪80年到90年代，中国人死因主要是肺结核，其次是腹泻和痢疾、肺炎以及肺部感染。这些人的寿命普遍在20岁到40岁之间。

Grocery stores such as EA Lums & Co in Subiaco (shown here in 1916) were established during the second wave of Chinese migration from the 1880s.

Subiaco的EA Lums & Co等杂货店（图中所示为1916年）是在19世纪80年代第二波中国移民潮期间建立的。

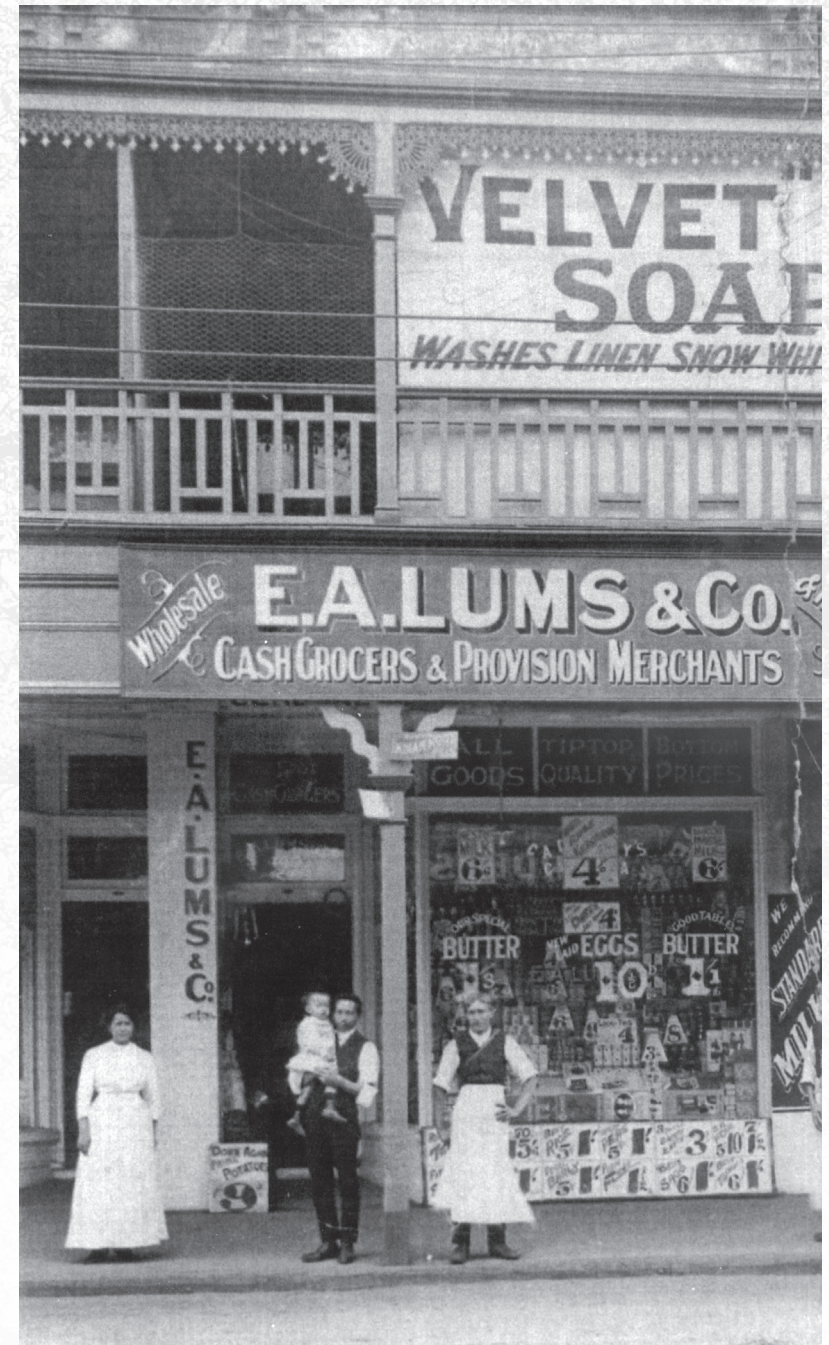


Image: State Library of Western Australia BA1483/2

图片来自西澳大利亚州立图书馆 BA1483/2

Buried far from home

Many of the Chinese who died in Western Australia in the 19th century were not accorded traditional burial rituals largely due to the absence of family to carry out these rites. Instead local funeral directors, mainly D J Chipper and Sons, made the arrangements and supplied the coffin and burial plot. The excavation found the Chinese had been buried in coffins inscribed with English lettering and were identical to those found in the adjacent Presbyterian Cemetery.

The correct treatment of the dead and appropriate burial has always been very important to Chinese people. It is known that bones were exhumed some years after death for return to the deceased's ancestral home, however in Perth very few official requests for exhumation were ever made. The expense and the absence of local support structures made this difficult. However a number of empty graves were found by the archaeologists, suggesting this tradition was carried out but maybe not recorded.

Traditionally burial rites for the young were simple, quiet affairs whereas for elders they would be public and elaborate. In 1890 *The West Australian* newspaper described the funeral of 22 year old Chew Lin. The use of a hearse for his body and buses to transport "his fellow countrymen" suggests a funeral more lavish than many local Chinese could afford and very unusual given his youth.

客 死 异 乡

19世纪,许多在西澳大利亚死去的中国人没有进行传统的葬礼,主要是因为没有人来举行这些仪式。取而代之的是当地的葬礼承办方,主要由D J Chipper and Sons殡仪服务安排并提供棺材和墓地。挖掘发现中国人被葬在刻有英文字母的棺材中,与相邻的长老会墓地中发现的相同。

对死者的正确处理和适当的埋葬对中国人来说历来是非常重要的。众所周知,尸骨会在死后几年被挖掘出来送回死者的祖籍,但在珀斯,很少有官方提出这样的挖掘要求。高昂的费用以及当地支持设施的缺乏使其变得困难。然而,考古学家发现了一些空坟墓,这意味着这一传统被保留了下来,但可能没有被记录下来。

传统上,年轻人的葬礼是简单的、安静的,而对于老年人的葬礼是公开的、复杂的。1890年,西澳大利亚报纸描述了22岁的周林的葬礼。用灵车运送他的遗体,用公共汽车运送“他的同胞”。这葬礼明显比许多当地中国人能够负担得起的更为奢华。对于一个年轻人的葬礼来讲,这也是非比寻常的。

THE unusual spectacle of a Chinese funeral was witnessed in the city yesterday. The remains were those of a Chinaman named Chew Lin, who arrived in the colony by the Australind, the other day, and died on Tuesday from consumption. The funeral took place yesterday morning, and started from the residence of Chew Youke. The coffin containing the body of the deceased man was placed in the hearse, and conveyed to the cemetery, a number of his fellow countrymen following in 'busses. Upon arriving at the Chinese cemetery, the coffin was laid in the grave, and the usual Chinese lights burned around it. Then, one of the Chinamen, who appeared to act as master of the ceremonies, threw a handful of earth into the grave, and repeated prayers for the one who, to use their periphrastic terms, had "saluted the age." He also cast a number of copper coins into the grave, after which it was filled in, which concluded the ceremony. Mr. Donald Chipper had charge of the funeral arrangements.

What was beneath the bitumen?

Archaeologists and forensic anthropologists uncovered the remains of 34 individuals from the Chinese Cemetery. Only three could be identified by name, Ah Min, Ah Sing and Sin Quen.

Remarkably a number of men's queue (hair braids) were preserved by the acidic, well-drained soil. Chemical analysis of hair can be used to indicate a person's past health and even the environment they were living in. The queue showed extremely low levels of zinc, a mineral that would have supported people's immune systems during Perth's 1890s typhoid epidemic. The hair also showed a diet reliant on cereals with dairy the main source of protein.

The excavations uncovered a great many artefacts including coffins and coffin furniture, fragments of clothing and a large number of buttons, many of copper but some of shell. A bracelet and some copper coins, grave goods intended to ensure the comfort of the deceased in the afterlife, were also found.

All the human remains were reinterred at Karrakatta Cemetery followed by a later ceremony conducted by members of the Chinese community to appease the disturbed spirits.

沥青下面是什么？

考古学家和法医人类学家在中国公墓发现了34具遗骸。只有三具遗骸能确认其名字，阿明、阿成和兴坤。

值得注意的是，许多男士的辫子（发辫）因其酸性、排水良好的土壤被保留了下来。头发的化学分析可以指出一个人过去的健康状况，甚至是他们的生活环境。辫子中显示的锌

含量极低，这种矿物质在19世纪90年代珀斯伤寒流行期间可以支持人们的免疫系统。头发也显示了依赖含乳制品的谷物的饮食习惯，而乳制品是蛋白质的主要来源。

挖掘发现了大量文物，包括棺材和棺木家具、衣物碎片和大量纽扣，其中很多是铜制的，但也有一些是贝壳制的。还发现了一个手

镯和一些铜币，这些都是为了确保死者来世安逸的陪葬品。

所有的遗体后来都被重新安葬在卡拉卡塔公墓，由华人社区成员举行仪式，以告慰被打扰的亡灵。



Archaeologists from Terra Rosa Consulting in January 2020 excavating the Chinese Cemetery.
2020年1月，来自泰罗莎咨询的考古学家正在挖掘华人墓地。



These pieces of coffin are typical of what was found by archaeologists. The coffins in the Chinese and Presbyterian Cemeteries were of the same make and decoration. Many Chinese coffins even displayed Christian motifs which suggests there were few coffin makers in colonial Perth.

The decoration was stencilled onto a layer of cloth which then covered the wood, to disguise the low quality of the timber.

这些棺材是考古学家发现的典型。华人公墓和长老会公墓的棺材在制作和装饰方面是一样的。许多华人的棺材甚至展示了基督教的图案，这表明珀斯殖民地很少有棺材制造商。

一层印有装饰图案布盖在棺木上，以此掩盖木材质量很差的事实。



Following a tradition dating back to c 5000 BCE, Chinese people were buried with grave goods such as these coins. They were to help the deceased in their journey into the afterlife.

These coins are a mix of sixpence, threepence and pennies. They are dated 1887-96.

按照中国传统（可追溯到公元前5000年），中国人用诸如硬币等物品陪葬。这些陪葬品保佑亡者来世生活富足。这些由六便士、三便士和一便士组成的硬币年代在1887-96年。



These fragments of marble headstone came from the same grave as the coins.

The four Chinese characters appear to suggest the deceased came from East Canton Province, Zhengcheng District.

The half 'stroke looks like the bottom part of '東' meaning 'East'

'广' refers to 'Canton', now known as Guangzhou

'州' means 'province'

'增' literally means 'increase' but it could be referred to as '增城' 'Zhengcheng District'

这些大理石墓碑的碎片与那些硬币来自同一个墓穴。从这四个汉字看来，亡者来自广东省东部的增城区。一半的汉字笔划看起来像“東”（东）的下半部分，“東”是指东边的意思；“廣”指廣東，现在被称为广州；“州”即是“省”。“增”字面上意思虽然是“增加”，这里是指“增城”区。





Jade has been highly prized in China since Neolithic times. It has often been included in funerary rites and holds many spiritual associations including beliefs of immortality. These precious jade bracelets were buried with different individuals. The paler one was found along with clothing fragments, a coin and a queue (hair braid).

自新石器时代以来，玉石在中国一直备受推崇。它经常被用于葬礼中，并拥有许多包括永生的信仰在内的精神寄托。这些珍贵的玉镯，陪葬于不同的墓穴中。颜色较浅的那个玉镯与衣服碎片、一枚硬币和一条辫子（发辫）一起被发现。

The East Perth Cemeteries Memorial for burials from the former Chinese and Presbyterian Cemeteries was unveiled at Karrakatta Cemetery in late 2021. It is here the human remains uncovered by archaeologists have been reinterred. Members of the Chinese community conducted a ceremony to appease the disturbed spirits.



2021年底，纪念前华人公墓和长老会公墓的迁葬，东珀斯公墓纪念公园在Karrakatta公墓揭幕。考古学家发现的人类遗骸被重新安葬在这里。珀斯华人社区的代表们特此举行了传统的华人祭奠仪式来抚慰被打扰的先人。

Members of the Chung Wah Association with former Metropolitan Cemeteries Board CEO Peter Deague, the Hon John Carey BA MLA, Minister for Housing and Local Government, and National Trust of Western Australia Chair the Hon Robert Kucera.

中华会馆的成员，包括前大都会公墓委员会首席执行官 Peter Deague、住房和地方政府部长 Hon John Carey BA MLA、西澳大利亚国家信托基金主席 Hon Robert Kucera都出席了该祭奠仪式。

Images: Metropolitan Cemeteries Board.
照片提供：大都会公墓委员会

A rare find

罕 见 的 发 现

In a grave dating between 1888 and 1899, archaeologists uncovered what appeared to be a remarkably well preserved wool jacket. Exposure to the atmosphere and associated changes in climatic conditions put organic materials at significant risk of rapid deterioration. It is extremely rare for such intact textiles to survive in archaeological deposits. It was essential the jacket was conserved—and quickly.

The Chung Wah Association raised funds from the Chinese community to enable the National Trust of Western Australia to undertake the conservation of the clothing. These donations were matched by Australian Development Capital and Warburton Group.

Over a period of 120 or more years the jacket had become rock hard, encrusted with sand and plant roots, and affected by the decay of the body. In a complex and difficult process an archaeological textile conservator used special chemicals to relax the fabric and remove the human remains that had survived the burial. Scientific testing revealed that high levels of chromium, used in the wool's dye, had helped preserve the fabric. There was also manganese, a fixing agent, and a sulphur/selenium mix which indicated three sources of wool used to make the cloth.

在一个建于 1888 年至 1899 年间的坟墓中，考古学家发现了一件看起来保存完好的羊毛夹克。暴露在大气中以及相关气候条件的变化使其有机材料面临迅速变质的重大风险。这种完好无损的纺织品在考古遗址中存活下来极为罕见。这件夹克必须得到保存——而且要快。

中华会馆从华人社区筹集资金，使西澳大利亚国家信托基金会能够承担这件夹克的保护工作。这些捐款得到了澳大利亚发展资本和沃伯顿集团的配合。

在 120 年或更久的时间里，这件夹克已经变得硬如岩石，它和表面的沙子和植物根系结成硬皮，还受到了尸体腐烂的影响。在

一个复杂而困难的程序中，考古纺织品保护员使用特殊的化学物质来松弛织物并移除埋葬后幸存下来的人类遗骸。科学测试表明，羊毛染料中使用的高含量铬有助于保护该织物。还检测到了锰、固定剂和硫/硒混合物，这是用于制造该面料的羊毛的三种来源。



The clothing prior to conservation showing the fabric matted with sand and plant roots.
出土的衣服表面布满沙子和植物根部。

The jacket was then washed, a process that revealed the body had been carefully prepared for burial with the arms crossed at the wrist. Scientific analysis revealed not only a jacket but also a vest and undershirt each made from wool, and a scarf of fine felt. Remnants of the trouser waistband completed the suit. There was no direct evidence of a shirt, the pH levels in the soil were too acidic for cotton fibres to have survived.

While there is nothing to identify these garments as uniquely Chinese, they were most likely the individual's best clothes therefore reflecting not only this person's economic status but also the beliefs, customs, traditions and practices of the Chinese community in the late 19th century.

夹克随后被清洗, 这一过程中发现尸体在入葬前经过精心处理, 双臂在手腕上交叉放置。科学分析显示, 不仅这件夹克, 还有一件背心和汗衫也是由羊毛制成的, 另外还有一条细毛毡围巾。裤腰带的残余物验证了西装套装的存在。没能找到衬衫存在的直接证据, 由于土壤中的酸碱值太低, 棉纤维无法被保留。

虽然没有任何迹象表明这些服装是中国独有的, 但它们很可能是个人最好的服装, 不仅反映了这个人的经济地位, 也反映了19世纪后期华人社区的信仰、习俗、传统和实践。

Ah Lun is shown here wearing a jacket very similar to the one found in the excavation. He and his family were photographed in 1902, three years after the last burial at East Perth.

照片中阿伦穿的这件夹克与挖掘中发现的那件夹克非常相似。他和他的家人拍摄于1902年(在东珀斯最后一次葬礼的三年以后)。



Image: NAA: K1145, 1902/52
照片来自NAA: K1145, 1902/52



Painstaking and difficult conservation treatment was needed to preserve the jacket.

Shown here along with remnants of a trouser waistband, it is an extremely rare garment and arguably of national significance.

为了保护出土的夹克，考古人员进行了复杂且耗精力的文物保护处理。上图展示了夹克与残余的裤腰带，这是极为罕见的考古发现，极具历史意义。



A wool undershirt and vest also survived over 120 years buried beneath the bitumen along with remnants of a fine felt scarf.
在沥青下历时120多年，一个羊毛汗衫和背心套装与细毛毡围巾的残余物有幸被保留下来。



At the launch of *Beneath the Bitumen*, members of the Chinese community gathered at the Chinese memorial at East Perth Cemeteries. It was erected in 1994 to acknowledge the contribution of Chinese people to Western Australia's history. In the launch of the exhibition "Beneath the Bitumen", members of the Chinese community gathered at the Chinese memorial at East Perth Cemeteries. This monument was erected in 1994 to honor the contribution of Chinese people to Western Australia's history.

Thank you

Opportunities to learn about our past through artefacts such as these are very rare and require a great deal of expertise, research and funding. The National Trust of Western Australia is honoured to be contributing to our knowledge of the Chinese community in Perth and, indeed, understanding more about our long history of multiculturalism.

The National Trust wishes to thank the following individuals and organisations for their contribution to this exhibition and for ensuring these precious artefacts have been conserved for the future.

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特别鸣谢

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