



Conserving ancient shipwrecks

BY **GRAEME HENDERSON**

Australians pioneered underwater cultural heritage conservation and have played key parts in the related UNESCO Convention, but we are yet to ratify it.

Fifty-one years ago, in 1963, I had just reached the age of 16 when I found, by chance, while diving with friends, the 17th century Dutch shipwreck *Vergulde Draeck*, off the Western Australian coast. At the time, it was the oldest wreck found in Australian waters. Carrying 76 000 Spanish guilders, it was a sensation in the press, stimulating community interest in early Australian history and, for the first time, an awareness of the importance of the underwater cultural heritage: the legacy of submerged physical artefacts and intangible attributes inherited from past generations.

The deliberate act of keeping cultural heritage from the present for the future is known as conservation. But in 1963, there were no underwater heritage protection laws, only salvage law. That became a problem when the first silver coins were found. Salvage law involves the concept of 'salvor in possession', and encourages destructive and violent activity on heritage sites. A diver wanting to become salvor in possession used gelignite to extract the silver and frighten other divers from the wreck.

Events following the discovery of the *Vergulde Draeck* showed the need for heritage laws, management programs and community support. This took time to develop because Australia was a pioneer in the field of underwater cultural heritage conservation and there were no overseas models. Such laws must be consistent and interconnected, providing a web of protection covering the seabed locally, nationally and globally.

The first small local step was taken in 1963 by myself and my co-finders of the *Vergulde Draeck*. Dismayed by the violence, we drew up a Deed of Assignment with the State's Crown Law Department, transferring what legal rights we had to the Western Australian Museum. In accepting these rights, the Museum took responsibility for the protection and management of historic wrecks, even before any protective legislation. The state government legislated in 1964, vesting in the Museum the sole right of working on historic wrecks. But that failed to stop the destruction.

When I joined the Museum in 1969, my colleagues were mainly ex-Navy clearance divers, tough men with the



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Corrosion chemists using pH and voltage measurements on the Japanese Kawanishi 'Emily' bomber to monitor the changes in the environment, Chuuk Lagoon, Federated States of Micronesia. Comparative measurements with the same plane wrecks in Saipan Lagoon showed that the two Pacific World War II sites are corroding at different rates but that the aluminium alloys are the same in each plane.

experience to confront dangers, and dangerous people, on the high seas. During the first six months of my employment, I saw detonation wires on the wrecks of the 1622 *Tryal*, 1656 *Vergulde Draeck* and 1712 *Zuytdorp*, and blast holes on the 1629 *Batavia*. However, the Museum's active archaeological excavation program initiated in 1971 was welcomed by the community, and the looting decreased.

In 1976, a diver, Allan Robinson, successfully challenged the state legislation in the High Court of Australia, on the grounds that the state government lacked authority to pass laws affecting offshore waters. This prompted the passing of

Commonwealth legislation (the *Historic Shipwrecks Act*) and the development of management programs covering all Australian states.

Ships engage in trade in foreign waters, so much of the underwater heritage is shared heritage, multinational heritage, important to both the country of origin and the site's neighbouring state. Awareness of the need for a comprehensive international instrument of protection emerged in the 1970s. During the jurisdictional uncertainty in Australia, the Netherlands government offered assistance in protecting Dutch wrecks in Australian waters. In 1795, the Dutch

East India Company, owner of the ships *Batavia*, *Vergulde Draeck* and *Zuytdorp*, had been nationalised by the Dutch government, who became heirs of the Company and the cargoes of the wrecks. In 1972, the *Agreement of the Australia Netherlands Committee on Old Dutch Shipwrecks* (ANCODS) was signed, vesting the right of recovery in Australia, who in turn delegated the authority to the Museum.

ANCODS brought ongoing close cultural ties, the Dutch taking a strong pride in their traders and explorers – who first visited Australia in 1606, and visited Western Australia in 1616. The Agreement had an element of



Molten wax impregnation and consolidation of heavily corroded bronze rudder pintle from the wreck of the American China Trader *Rapid* (1811); Ian MacLeod and Jennifer Edwards, intern from Australian War Memorial. The microcrystalline wax stops moist air getting to the extensively corroded object and causing accelerated decay. Analysis of the corrosion processes showed the pintle had been buried in 25–30 cm of coral debris.

one-upmanship – Robinson had challenged laws at the state level, but would he have the courage to challenge an international treaty? ANCODS, an example of successful international cooperation, has been tested in court, and has symbolic importance as a worthy model for other nations to pursue. A bilateral agreement, it can be seen also as the first step towards multilateral agreements providing a network of global protection through coordinated action.

Robinson's death in 1983 ended the era of destructive individual treasure

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hunters in Australian waters, but a new threat was emerging. Ronald Reagan and Margaret Thatcher argued persuasively that markets, not government, held the key to prosperity and freedom. But with the dissolution of the Soviet Union, some free-market entrepreneurs felt that everything, including the underwater heritage, should be commercially exploited. In his book *What money can't buy: the moral limits to markets*,

Michael Sandel argues that the developed world has drifted from having a market economy to having a market society. In Australia, beginning in the 1980s, investor-funded commercial salvage schemes targeted the underwater heritage. These schemes were led by sophisticated businessmen, with the charm to influence investors, public officials and politicians. But because the level of protection had so increased in Australia with the Commonwealth legislation, these ventures were generally focused overseas in the waters of nations lacking legislation, or in international waters.

On the positive side, by the mid-1980s Australian archaeologists and materials conservation experts were playing a lead role in educational initiatives in many parts of Asia, raising awareness of the importance of the underwater heritage and developing local management expertise. The Council of Europe, UNESCO, the

International Law Association (ILA), the Australasian Institute for Maritime Archaeology (AIMA), the International Congress of Maritime Museums (ICMM), and Australia ICOMOS (International Council on Monuments and Sites, a UNESCO affiliate) were progressing other fronts.

The discovery in 1985 of the *Titanic* wreck at 3700 metres, and its subsequent plunder, made the international community aware that sites in the deepest oceans were accessible to destructive activity. UNESCO immediately became involved. At a UNESCO Regional Seminar on the Protection of Movable Cultural Property, held in Australia in 1986, it was observed that wrecks on the deep seabed are of particular importance, since for various chemical and biological reasons, many are likely to be in an exceptional state of preservation. The Secretariat issued a statement that if positive steps were not taken immediately, the recent advances made by treasure hunters, particularly in South-East Asia, would result in a tragic loss of heritage.

In 1990, the ILA prepared a draft UNESCO convention on the underwater cultural heritage. Compiler Patrick O'Keefe envisaged that for the convention to be effective, nationals would be required to abide by specified criteria in excavating historic wreck sites, and that these criteria might be drawn from such documents as the 1956 UNESCO Recommendation on Archaeological Excavations and the 1990 ICOMOS Charter for Archaeological Heritage.

Australian archaeologists were concerned about the escalation of

auctions, such as Christie's \$15 million auction of the porcelain, salvaged by an Australian, from the wreck of the Dutch ship *Geldermalsen*. Australian archaeologists initially employed a different strategy from that of the ILA, developing non-prescriptive codes of practice, within Australia, with the ICMM, and with ICOMOS.

In 1989, AIMA, at the invitation of the Commonwealth Government, commenced its code titled *Guidelines for the management of Australia's shipwrecks*, comprising the principles and practice adopted by Australia's professional maritime archaeologists and intended to serve heritage bodies, developers, teachers, the diving community and museum visitors.

In 1987, I chaired a committee of the ICMM, whose 284 members comprised most of the world's largest maritime museums, with a brief to survey existing museum acquisition policies for objects from underwater sites. I saw this as an opportunity to address the demand side of the international market in antiquities from the underwater cultural heritage. If museums stopped buying, salvors would lose that market. The survey led to the adoption in 1993 of standards for the exploration of underwater sites, including the policy to not knowingly acquire or exhibit artefacts removed from commercially exploited sites in recent times.

Even as this code was published, there was evidence that it would be ineffectual without legal force. One museum entered into a contract with RMS Titanic Inc. to exhibit the material that company was salvaging. RMS Titanic was selling pieces of coal from the wreck, asking the public to help preserve the *Titanic* by purchasing items.

Australia ICOMOS facilitated a more successful strategy, matchmaking archaeologists with legal experts and so providing the opportunity for amalgamating the non-prescriptive and prescriptive approaches. ICOMOS members had



The pair of bronze astrolabes, Dutch navigational instruments from the Batavia wreck used for determination of latitude. The left-hand astrolabe had been exposed to the full brunt of the surf on Morning Reef, Abrolhos Islands, for 350 years; the right-hand astrolabe was in pristine condition, having been buried in an iron cannon ball corrosion matrix, which protected it from corrosion by galvanic action.

been lobbying the Australian government in 1987 with their concerns about commercial projects. In 1991, I responded to a request by ICOMOS to develop a new vehicle, the International Committee on the Underwater Cultural Heritage (ICUCH). Its mission was the establishment of a structure of international environmental cooperation in the field of underwater cultural heritage.

The ILA envisaged that for the convention to be effective, nationals would be required to abide by specified criteria in excavating historic wreck sites. But there was no awareness within the maritime archaeological fraternity of the activities of the ILA in producing their draft UNESCO convention. So in August 1991, Patrick O'Keefe wrote to me, inviting ICUCH to prepare these criteria – standards by which deviant conduct could be measured. This was a better plan than using the 1956 UNESCO Recommendation, or the 1990 Charter, documents that did not deal with the underwater cultural heritage.

ICUCH developed the *International Charter on the Protection and Management of the Underwater Cultural Heritage*, adopted by

ICOMOS in 1996. UNESCO used this Charter, a statement of fundamental professional standards, to develop the *Annex* – rules concerning activities directed at underwater heritage – for the *International Convention on the Protection of the Underwater Cultural Heritage*, adopted by UNESCO in 2001.

To date, 48 States have ratified the Convention and the emerging matrix of protection is having a major positive impact. Sadly, ratification is not uniform across the globe and our region, rich in significant underwater cultural heritage, is one of the slowest to take up the Convention. Australians played important roles in the initiation and development of the Convention but the Australian government has not yet ratified it. The 100-year commemoration between 2014 and 2018 of events relating to World War I, and the 400-year commemoration in 2016 of Dirk Hartog's landfall in Western Australia, present timely opportunities for the Australian government to announce ratification of the 2001 Convention.

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