Rhodes has some good news. Since the end of the cold war, he says, “the irregular but unmistakable trend in international relations has been towards the reduction and elimination of nuclear arsenals”. It is a trend obscured by the real dangers of new programmes in Iran and North Korea and by the threat-inflation arguments used by zealots against arms-control treaties, but it is borne out by the historic arc traced by Rhodes.

Global nuclear arsenals are one-third of the size they were at the height of the cold war, shrinking from an estimated 70,000 nuclear warheads in 1986 to 22,000 today, with 96% of these held by the United States and Russia. More countries have given up nuclear weapons and programmes in the past 25 years than have tried to acquire them, including Argentina and Brazil in the 1980s; Ukraine, Belarus, Kazakhstan and South Africa in the 1990s; and Libya and Iraq in the 2000s. Experts agree that the gravest threat now is from nuclear terrorism. Following from that assessment is a growing consensus that, as Rhodes says, “the world faces a stark choice: eliminate nuclear weapons and secure their fissile explosives or expect them to be used.” But how to eliminate them?

Rhodes is no pacifist. “A war [as with Iraq] might well be a last resort against a resistant proliferator,” he concedes. But his preferred methods are the “nuts-and-bolts” policies worked out over the past 15 years by international commissions and realists such as US politicians George Shultz, Sam Nunn, Bill Perry and Henry Kissinger — and increasingly adopted by the United States, the European Union and countries elsewhere.

The emerging nuclear security consensus includes a commitment to eliminate nuclear weapons over time and practical steps toward that goal, including verifiable reductions in US and Russian arsenals, a ban on nuclear tests and an end to the production of weapons materials. In a world moving towards nuclear zero, nations are more likely to cooperate to lock up all supplies of highly enriched uranium and plutonium — thus denying terrorists the one part of the bomb they cannot make themselves — and to isolate and punish states that try to start new programmes.

Rhodes’s unflinching examination over the past 25 years of the promise and horrors of nuclear weapons has educated a generation. I hope his vision for the next 25 inspires another. ■

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ENVIRONMENT

Venice’s fragile lagoon

A section of salt marsh in a Biennale pavilion links the city and its environment, notes **Colin Martin**.

Dazed by Venice’s architecture, few people look beyond the city to its lagoon. To raise awareness of the lake’s ecological complexity and beauty, environmental scientist Jane da Mosto has, with permission, removed a 15-metre-square section of Venetian salt marsh and installed it in a stainless-steel tank washed by artificial tides. It is on display in the British Pavilion of the 12th International Architecture Exhibition (the Venice Biennale) until 21 November.

“Venice is so fragile, in its physical, environmental and even socio-economic dimensions, that we must develop viable plans to ensure its survival,” says da Mosto. First-hand experience of nature often generates more emotion than dry scientific data: she reports that locals and visitors who had thought of the lagoon as just a muddy space have been moved by the marsh’s beauty.

The Venice lagoon is a winter migration halt and breeding area for 200,000 birds. Along with Tunisia’s Gulf of Gabès, it is one of the most important wetlands in the Mediterranean Basin. The exhibition includes taxidermic specimens of 24 of the 60 species of water bird found in the lagoon, lent by the Venetian Museum of Natural History. Maps and panels, prepared by da Mosto and Tom Spencer, director of the Coastal Research Unit at the University of Cambridge, UK, detail the lagoon’s wildlife and flora, rivers, inlets, marshlands, water levels and ecology.

In addition to seasonal flooding and

mass tourism, the urban fabric of Venice is challenged by rising water levels. Da Mosto and Spencer are analysing historical and contemporary data on the area’s geography, hydrology, flora and fauna to illuminate the fragile ecological balance of the lagoon and the consequences of its disruption for Venice’s buildings. They aim to articulate how the fate of the city and its waters are connected.

Until the collapse of the Venetian Republic

Villa Frankenstein: Venice Lagoon

The British Pavilion,
12th International
Architecture Exhibition,
Venice, Italy
Until 21 November
2010

in 1797, the lagoon was well maintained. Waterways were managed, and the waters provided a livelihood for fishermen in the city and outlying islands. When rail and road links to the main-

land were established, Venetians’ connections to the lagoon dwindled as they came to depend more on tourism for their income.

Appropriately, the exhibition catalogue is printed on ‘Alga Carta’, a specialist Venetian paper made from harvested algae that would otherwise clog the lagoon. It will be decades before scientists can write ‘done’ against their lagoon investigation, as the nineteenth-century art critic John Ruskin did for his exploration of the city’s architecture. But this is an excellent start. ■

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The transplanted salt marsh highlights the importance of the ‘muddy space’ outside Venice.

THE BRITISH PAVILION AT VENICE, THE LAGOON ROOM