#### Maria Thereza Alves

# Seeds of Change: A Floating Ballast Seed Garden



## **Designed by Gitta Gschwendtner**

Seeds of Change is the overall title of an ongoing investigation of ballast flora in the port cities of Europe by the Brazilian artist Maria Thereza Alves.

Between 1680 and the early 1900's ships' ballast - earth, stones and gravel from trade boats from all over the world used to weigh down the vessel for its journey to Bristol - was off-loaded into the river or onto the quayside at Bristol. This ballast contained the seeds of plants from wherever the ship had sailed.

Maria Thereza Alves discovered that ballast seeds can lie dormant for hundreds of years, but that by excavating the river bed, it is possible to germinate and grow these seeds into flourishing plants.

Working with the University of Bristol Botanic Garden, Arnolfini and Bristol City Council and utilising a disused grain barge, Maria Thereza Alves has created a Ballast Seed Garden on Bristol's Floating Harbour, populated with a variety of non-native plants, creating a living history of the city's trade and maritime past.

The floating garden has been designed by German designer Gitta Gschwendtner to create a contemplative architectural space to walk, sit and observe the plants, with specialist advice from Nick Wray at the University of Bristol Botanic Garden and Lucy Empson at Bristol City Council. Structural engineering advice from Ramboll; plants courtesy of the University of Bristol Botanic Garden; construction by Arnolfini with the assistance of the Avon and Somerset Probation Trust Community Payback team.

## Location

Floating Harbour (north side) between Bristol Bridge and Castle Park water taxi stop.

## Access:

Visible from Castle Park or on boat by appointment, call 0117 922 3064 for further information.



#### **Ballast Flora**

Ballast flora is a category of plants that has become part of the English landscape. It refers to the product of seeds which were brought to this country in the ballast on ships, particularly between the 18th and early 20th century when it was commonly used in mercantile shipping. Ballast generally consisted of sand, stone, earth, pebbles, shells or other cheap materials that came to hand, which was used to balance ships if their cargo was too lightweight. Arriving in port the ballast was unloaded (often clandestinely to avoid taxes), and with it came seeds from all around the world. These 'ballast seeds' can sometimes lie dormant for hundreds of years in the port.

#### **Seeds of Change Bristol**

Maria Thereza Alves was invited to come to Bristol in 2007 to develop a project for the Group show Port City at Arnolfini. During this period Alves researched the sites where ballast would have been off-loaded around the Floating Harbour and along the Avon River, digging up samples of earth in which seeds might lie dormant. With the help of local individuals and groups (many of whom have family links to the port cities Bristol traded with), these seeds were germinated. The resulting array of plants, which were grown up from these small plots of the local terrain, could thus be seen as a living embodiment of the port's history of trade, reflecting the different routes travelled by Bristol merchants worldwide. Alves says, "Seeds of Change: A Floating Ballast Seed Garden is an attempt to re-establish the histories of complexities of ballast flora and the potential of individual histories that these plants were witness to, previously isolated from their intimate connection to the economic and social history of Bristol."

## Floating Garden Design Concept

Gitta Gschwendtner's design for the floating ballast seed garden aims to give the visitor an opportunity to experience the garden from various levels and perspectives. The raised bed structure with its sunken paths and seating areas immerses the visitor into the garden, while the elevated central pathway allows an overview of the entire garden emphasising its water based location. The architecture of the garden works with the structural constraints of the concrete grain barge, with an elevated planting bed that conceals the barges large hold space where grain was loaded onto the vessel for transport. Sustainability is an important aspect of the project, and both the garden's irrigation system – using water pumped straight from the floating harbour – and its lighting system, are powered by solar panels. The construction materials used are also sustainable, including pine treated with an environmentally friendly oil stain to soften its appearance and preserve it from weathering.

## **Maria Thereza Alves**

Maria Thereza Alves was born in Sao Paulo, Brazil in 1961. She was one of the co-founders of the Green Party in Brazil. She attended the Cooper Union School of Art in New York City. She lives in Berlin and Rome. In 2006 she was awarded a DAAD scholarship (Deutscher Akademischer Austauschdients/German Academic Exchange Service). Her work has been exhibited widely across Europe and North America. Exhibitions include In Transit at New Museum of Contemporary Art, New York (1993), The 49th International Art Exhibition at The Venice Biennale, Venice (2001); Echigo-Tsumari Art Triennial (2003), Manifesta (2009), Lyon Biennale (2009), The Sao Paulo Biennale (2010), and dOCUMENTA (13) (2012).

# Gitta Gschwendtner

Born in Germany in 1972, Gitta Gschwendtner moved to London in the early nineties to study design at Central Saint Martins, Kingston University and the Royal College of Art. Following graduation from the RCA furniture MA in 1998 she set up her independent design studio in London working on a diverse range of projects ranging from product, interior and exhibition design to public art installations for arts, cultural and corporate clients. Gitta's studio focuses on conceptually rigorous, visually intriguing, functional design across several disciplines. Her clients include British Council, Crafts Council, Design Museum, DuPont Corian, Geffrye Museum, Habitat, Innermost, Mathmos, Peugeot, Purves & Purves, Royal College of Art, Science Museum, Sony, Twentytwentyone, Victoria and Albert Museum and the Wellcome Trust.

## **Port City**

Salsola Kali from Africa was found on ballast in Avonmouth. Amaranthus Albus from North America was found on a ballast tip on Grove Quay.

The people of the Susu, Gola, Limba, Mende and Yalunka tribes were among those enslaved on Bance Island in Sierra Leone and taken by Bristol slave ships to Jamaica to be sold in order to replace the indigenous Arawaks (who had been traders and travelled long distances from island to island in their canoes) none of whom survived contact with the Spanish (or the English, who came just a little later). These ships would then continue onto the Carolinas to bring slaves to replace the indigenous work force there, the Cherokees, two-thirds of whom were also not able to survive contact with the English. Ballast taken from Jamaica (with seeds which could have come from any of the islands with which the Arawaks had traded) or the Carolinas. and therefore from anywhere along the east coast where Cherokees traded, could mix with seeds accidentally coming from any of the villages which were attacked by slavers in Sierra Leone. Among the villagers were the Sasu who were originally from Guinea and were also traders, nomads and farmers. The Limba are autochthonous to Sierra Leone. The Gola are from Liberia. The Mende, who were originally from the Sudan and were traders with neighbouring countries such as Liberia, Ivory Coast and Guinea. Seeds from any of these places could have arrived in Bristol and been unloaded in the ballast dumps at the Wapping Quay, which is now the site of M Shed.

Slavery was not abolished in Sierra Leone until 1928 but it remained widespread until the 1970s. It has the world's highest maternal mortality rate. Life expectancy for men is 42 years old. The UN has declared Sierra Leone today the most inhospitable country in the world, based on poverty and poor quality of life endured by its citizens.

Senebiera Pinnatifida from Argentina was found growing on ballast in Bristol. Pisum Arvense from Portugal was found on a ballast heap in Wapping Quay.

Sebastian Cabot, possibly a Venetian but who considered himself to be an Englishman from Bristol, was a good friend of the mayor of Bristol, Robert Thorne, who had a soap factory in Seville, and a business of trading Africans and Canary Islanders who had been made into slaves. Thorne invested in Cabot's trip to La Plata River in Argentina where, with African slaves, he enslaved some Amerindians; most probably the Guarani, whose territory also includes parts of Brazil, which the Portuguese colonized. The Portuguese were the first Europeans to have a monopoly on the slave trade. Maybe these plants arrived in Bristol because of Cabot? Colonization forced the Guarani on a migration movement in search of "a place without the Bad" to settle in. The Guarani did not find it. Some of them ended up in Mato Grosso where Marçal de Souza, a Guarani who fought for land and indigenous rights, was assassinated in 1983. Brazil abolished slavery in 1888 but in 1984 Maria Thereza Alves' Uncle Antonio was still afraid to travel outside of his village in the state of Parana for fear of being made into a slave.

An incomplete list of some of the indigenous languages which no longer exist in Argentina includes: Chané, Güenoa, Chaná, Abipón, Payaguá, Mbeguá, Lule, Manek'enk or Haush, Teushen, Allentiac or Alyentiyak, Toconoté, Millcayac or Milykayak, Omaguaca, Cacán, Kunza or Likanantaí, Comechingon or Henia-camiare, Sanavirón, Het, Yagan, Yámana or Háusi-kúta.

In Brazil 75% of the languages became extinct after colonization and at the moment 133 languages are endangered.

Text by Maria Thereza Alves, reproduced from the publication *Port City: On Mobility and Exchange*, Arnolfini, 2007.

## **Commissioner and Funding**

Seeds of Change: A Floating Ballast Seed Garden was commissioned by Bristol City Council as part of its public art programme. The project was funded by the Ashley, Easton & Lawrence Hill Neighbourhood Partnership, with the kind support of Bristol Harbour Authority, Arnolfini, Ramboll, University of Bristol Botanic Garden and Avon and Somerset Probation Trust Community Payback team. For further info see: www.aprb.co.uk



Maria Thereza Alves, Seeds of Change: Bristol, 2007. Installation view at Arnolfini Gallery, Bristol. Image courtesy of Arnolfini.



Maria Thereza Alves, Seeds of Change: A Floating Ballast Seed Garden, 2012. Courtesy of Bristol City Council. Photo © Max McClure

## **Events**

£5/£4 Concessions, except where stated.

Please meet at Arnolfini box office for each tour.

Saturday 8 September, 2pm-3.30pm, Boat tour
Afternoon boat trip and tour led by Gitta Gschwendtner,
Designer of Seeds of Change: A Floating Ballast Seed Garden.

Wednesday 12 September, 6.15pm-7.30pm, Boat tour An evening boat tour with Nick Wray, University of Bristol Botanic Gardens, uncover the botanical background to the Ballast Seed Garden.

Saturday 29 September, 2pm-3.30pm, Micro-sound tour
A micro-sound tour with the artist Matt Davies, sound recordist
for Plant Orchestra. Listen to the extraordinary secret sounds of
plants from the Ballast Seed Garden. Hear clicks, gurgles and
more unusual noises as they respond to light and water.

Friday 19 October, 6.30pm: Storytelling on the barge
The first of two performance events indebted to the art of
storytelling. Travel to the Ballast Seed Garden by ferry for an
evening rendezvous with two performers, each with a story to
tell. Refreshments will be available in situ. (Performance time
approx 45 mins).

Wednesday 31 October 6pm-7.30pm, Halloween boat tour £5.00/Free for children under 12

Halloween Ghost Tour by boat of the Ballast Seed Garden. Dress up as your favourite ghost or ghoul and join our story teller for a river tour to uncover the ghostly secrets of the Harbourside.

















