

Environmental Impact Report

Dear Octopus

Lyttelton Theatre



Photograph of the Final Model Box

Introduction

At the end of 2023 and early 2024 the National theatre began contracting their Artists to commit to deliver a show that meets Theatre Greenbook baseline standard. This all works towards the ambition of the National Theatre to be Net Zero Carbon by 2030. These reports are intended to capture anecdotal data that will feed into future practice and process when making large scale theatre to eventually deliver Advanced Greenbook standard as common practice. These reports are a documentation of both successes and challenges and are to be used as a tool for organisational learning and change – most importantly it will reflect the shared sense of environmental responsibility. NB: These reports are written post-press night performance and by the completion of the run, with an opportunity for all parties involved in the delivery of the production to contribute.

Principal Artistic and Production Team

Director -	Emily Burns
Writer -	Dodie Smith
Set & Costume Designer –	Frankie Bradshaw
Lighting Designer –	Oliver Fenwick
Sound Designer –	Tingying Dong
Producer –	Fran Miller
Production Manager –	Heather Doole

Show Summary

When a golden wedding anniversary reunites the Randolph family on the eve of WWII, Dora and Charles must reckon with the adults their children have become. Their children, meanwhile, are haunted by the memory of the family they once were.

As the weekend’s celebrations unfold, the family walks a tightrope between intimacy and estrangement, camaraderie and rivalry, love and hate.

Data from Material Trackers

Department	Predicted Reuse	Actual Reuse	TGB Standard Attained
Scenery	77%	63%	Baseline (data incomplete)
Props	52%	83%	Intermediate
Costume	75%	66%	Baseline



Design

For this production, Frankie Bradshaw (designer) and Emily Burns (director) factored the theatre green book heavily into their process; designs were submitted, and big decisions made early, allowing time in the build to source and make more sustainably. Reuse was considered in the design for this show and Frankie chose to make use of existing stage equipment - the stage revolve and the flying system - which negated the need to build heavyweight, engineered scenery anew.

Scenery

Most of the walls were made using the ‘Jef and Janet’ reusable flats made by the workshops last year – these flats are comprised of a metal frame with wooden cladding that can be used repeatedly. All the walls were lined with lining paper, which is made from recycled paper and applied using Peel – an adhesive that allows clean removal of the wallpaper, therefore not damaging the flats underneath so they can be reused. Scenic art used Graphenstone paint

colours – GrafClean is a new range of low VOC, plastic-free paint, supplied by Flints from January 2024. Frankie (designer) was flexible regarding the mouldings used, which allowed Construction to reuse salvaged mouldings from previous shows and this meant only buying a very small amount new.

One area where Construction was unable to reuse material was in constructing the flown wall; due to weight restrictions, this had to be made from twin-wall. However, the decision was taken to design and build the metal frames in a modular way that could be used for flown scenery in the future, or that could be easily turned into a 'Jef and Janet' flat instead, **making its future life potential more possible**. Another area where Construction hoped to use more reclaimed material was for the wall panelling, however Construction unfortunately didn't have access to enough reclaimed material in this instance.

Construction expected a wider margin in the percentages of reuse on this show, however it's believed the main reason for this was the decision to use a birch-ply sacrificial floor. Despite this, this production is a good example of how, with enough modular, stock items in circulation, environmental design doesn't have to equal minimalism.

Props

This show being set in the 1930s made sourcing second hand a natural choice, and the artistic team were very much on board with sourcing everything from our stores first and then antiques markets.

There is food scripted in this show, however, early meetings to discuss the concerns around this resulted in all meals be set at the end of the dinner once food had been cleared, which greatly reduced consumables to toast, some fake food and some drinks. Meeting with the artistic team early to discuss, and everyone being amiable to some script changes to allow for this, made for huge savings in time, money, and food waste.

Some items did need to be brought new, for example tablecloths and artificial flowers that were very specific. However, the decision was made to buy artificial flowers instead of real ones as these at least can have a future life in another show.

There is a real flame log fire in this production, and Props decided to use ceramic logs instead of purchasing new ones, however in hindsight, this wasn't the most sensible decision from a safety or environmental perspective as they're not being used in the way recommended by the manufacturer which has resulted in us buying unanticipated replacements.

Frankie (designer) was flexible regarding the glassware used at the table setting which allowed the props team to source 16 settings second hand, which were all similar styles but not exactly matching.

The flexibility of the artistic team has been key to meeting TGB intermediate standard in props on this show.

Costume Production

The costume team had a really good experience using Cosprop's, and by holding fittings there it meant they didn't need to bring all the options for fittings to the NT, which saved a lot of transport. The excellent quality of the costumes has meant that the running repairs and/or replacements have been minimal on this show.

Frankie (designer) was very open to using fabric from NT stock for some of the makes and the Costume department also found some companies that make vintage-style clothing using deadstock fabric.

The Costume department found it was incredibly helpful setting out their approach to costuming this show with Emily (Director) pre-rehearsals. From the start, she knew Costume wanted to do the majority from hires, and that to costume this show in line with our green book targets everyone would need to be open to what could be found, and that when it came to the children, Costume would create looks for the 'sets' of children that may not be identical. This also meant Costume could schedule fitting times and slots very early on in the process.

However, this kind of costuming did make fitting understudies tricky. Creating a matching look for the understudies could only happen once all fittings for the main cast were complete and Costume knew what they were replicating. The logistics of this meant, understudies were not ready by tech and did require more new items to be purchased than we had predicted.

Costume felt they delivered a show in as green a manner as they can currently. It is clear the next step in the process will be investigating the provenance of suppliers.

It was interesting to see the impact of having children in the cast on Costume's TGB statistics, as currently it is extremely hard to costume children from vintage or second-hand items. They also change size quite drastically throughout a run!

Wigs, Hair and Make-up

Emily (director) donated some of her own hair to Wigs, hair and make-up (WH&M) to be made into a wig for this show, and two other wigs were reused from a previous show (Dear England). Less hair was used in the making of the wigs to create a more natural look, but this also reduced the amount of hair used overall, from approx. 200g to between 130-150g – this equated to approximately one and a half whole wigs saved across this production. For understudies, the actors' own hair was used and styled instead of doubling up wigs. All wigs are being wet set by WH&M in a traditional method, so there are no heated appliances used which saves electricity as heated appliances draw power heavily.

One wig was made to design specifications, but the decision was made to remake it in line with the actor's wishes for their look. This of course added to the environmental impact of the wigs overall, however the original wig was repurposed for the understudy so did not go to waste. **All the wigs created for this show will go on to have future lives.**

Lighting

On this production there was open collaboration from Oliver Fenwick (Lighting Designer) who was willing to utilise mostly in-house LED source fixtures. Lighting hired extra units from a UK-based supplier, who try to combine transport runs so there is less carbon impact. All additional fixtures were LED source where possible, and some fixtures which were borrowed from another venue were picked up on foot! The LED tape was reused from previous productions, as were the drivers and PSUs, and will be used again where possible. All items purchased new were ensured to be suitable for future life.

The artistic team were open to suggestion and collaboration on more environmentally friendly options, and R and D had a relaxed approach which was very helpful. **Lighting found the process of making a sustainable show is made easier when all collaborators are willing to buy into the concept and utilise in-house equipment. Finding solutions such as lending and sharing equipment with other venues, and willingness to reuse rather than buy new is welcome and leads to more success in achieving sustainable productions.**

Sound and Video

Sound continued to reuse existing stock on this show, for example, radio mic heads and speakers. Only one additional box was hired which arrived on a delivery truck which was also coming for a collection.

The Sound team make a concerted effort to orchestrate collections and deliveries at the same time to cut down on courier journeys. This was a successful show, environmentally, from a sound perspective.