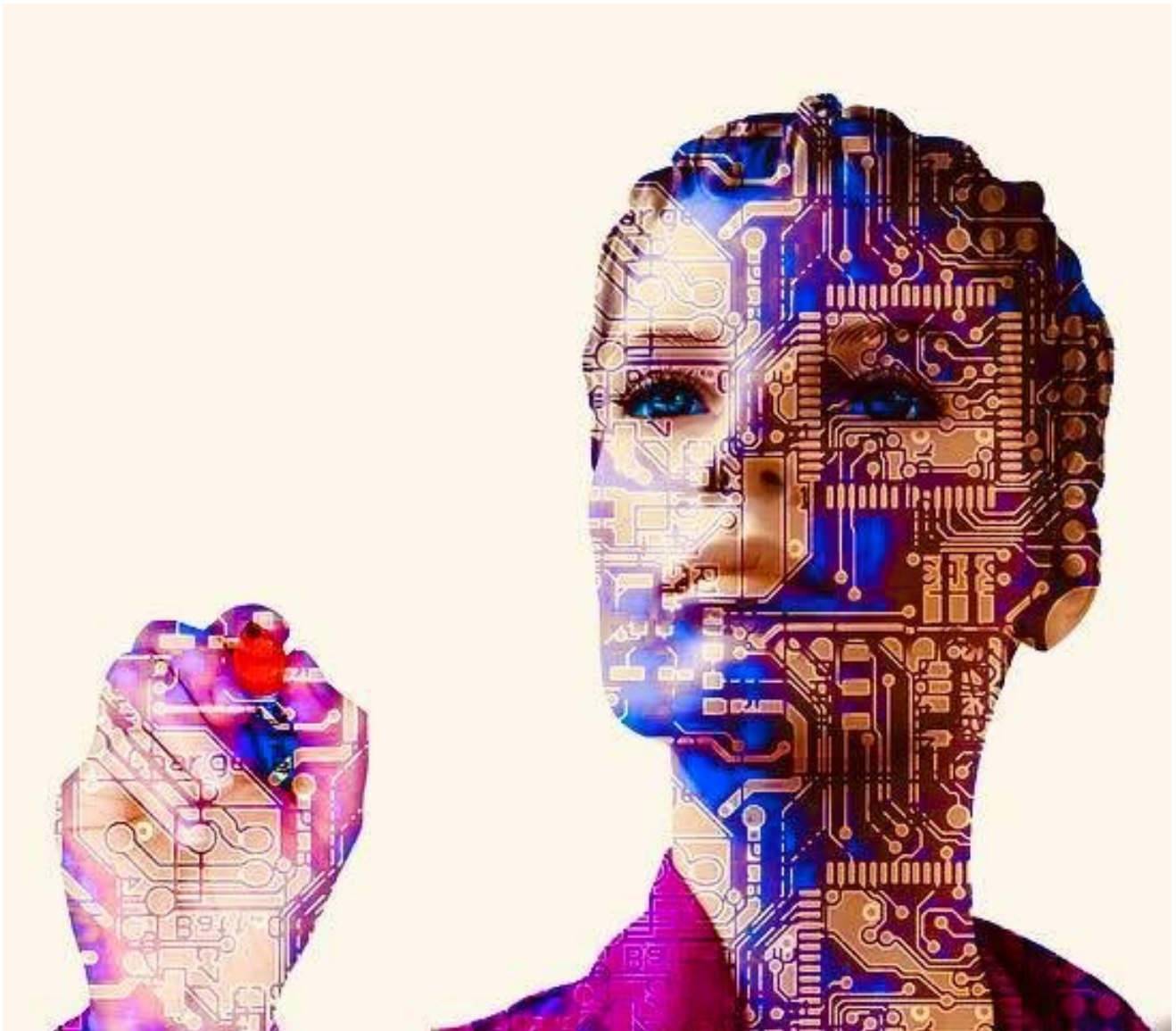


# SHE

Educational Pack KS3



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# Introduction

We are a group of 16 Third Year Theatre and Performance students at The University of Leeds. As a team we have collaborated to create our final year performance *SHE*. The project aims to take its audiences on a journey through the untold stories of women engineers throughout history. These women had brains and brilliance, but they were restrained and limited at a time where women were not considered equal to men. Therefore they never received the credit they deserved. We intend on changing this, by telling their stories, and shedding light on the women who have been too long forgotten.

This piece comes at an appropriate time, as 2019 is the centenary of the Woman's Engineering Society. This society was put in place on June 23rd 1919, the key idea was that this would help women keep their engineering jobs after the WW1. In addition the society hoped to encourage other women to take up the job. Its network is just as important now as it was then. We hope our performance will reflect the values of the society, in inspiring and educating our audiences on women in engineering.

## The Team

### **Project Supervisor :**

Dr George Rodosthenous

### **Cast :**

Amelia Hampton-Williams

Abbi Karitons

Rebecca Heffer

Chloe Cobham

Fran Partlett

Lucy Johnson

Natalia Jarosz

Yasmin Rapley

William Anderson

Rhianna Malyn

Sam Sheppeck

Kieron Williams

Saskia Connolly

Maria North

Lucy Murphy

Emma Hartford

# The Creative Process Research

When faced with the task of putting these incredible stories on stage, we first founded our creative process in extensive, detailed research. Our aim was to collect verbatim material that could then be used in the piece. Verbatim theatre is defined as ‘a form of documentary theatre that uses the real words of the people being portrayed’; we have tried to include this as much as possible in our performance.

Our research process has been supported by the AHRC project: *Electrifying Women: Understanding the Long History of Women in Engineering*. Professor Graeme Gooday who runs the project gave us an incredible presentation on some of the most important British women engineers, for example Amy Johnson (as seen in photo).

This presentation inspired us to dig even deeper into the stories. Professor Gooday explained how the truth about these women’s lives had often been covered up or simply ignored. We therefore sent a team to the Special Collection Archives in the Brotherton Library at the University in order to undercover as much information as we could. Here we had access to a plethora of materials, such as the entire catalogue of ‘The Woman Engineer’ magazine, which had numerous articles about the women we were so intrigued about.

In addition to materials about our women engineers, we also looked at newspaper clippings, photos and letters from the different periods these women were living in, in order to get a better idea of how women were treated in general at that time. This was essential in contextualising why women engineers were always pushed aside; they were working in a man’s world.





# The Creative Process

## Devising and Rehearsing

Our company has spent 8 weeks in rehearsal. This time has been spent devising, experimenting and collaborating ideas. All with the aim of shaping the stories of the women engineers into elegant and interesting theatre. Time has therefore been spent discussing our thoughts, putting pen to page, and getting up on our feet to put our ideas into action. We believe this process has created an effective, polished piece of drama that is both factual and inspiring.

Our rehearsal process began with each member of our ensemble doing a solo presentation on our own individual research and vision of what the piece could be. Many of these presentations created stimulus and provoked thought which then led us to each create a solo monologue on what we had found most captivating. Therefore within the first rehearsal we had 16 different ideas to work from, and some of these ideas from day one can be found in our final piece. Most importantly this process allowed everyone to have their voice and idea included in our work.

Over the following rehearsals we continued to devise and workshop ideas and stories. This allowed us to generate a lot of material very quickly, which we could then go back to edit and polish.

Overall what was most important was that we worked as an ensemble that listened to each other, and everyone was dedicated to making great work. Our main ideology in rehearsal was that it was everyone's piece, and everyone should have equal input.



# The Creative Process

## Scripting

Following on from devising, at about week three, it was time for our script writers to sit down and put our devised work onto the page. Having a script was an essential part of our performance, as it created the backbone of piece. We needed to script our work in order to find structure and to elongate scenes. Devising was a great way to get ideas flowing, and following this with writing allowed us to create a more coherent performance.

## Interview with a Script Writer - Lucy Johnson

### ***How did the script writing process begin?***

It began in the second week of the process, after we had explored and devised short scenes in our rehearsal sessions. We spent a while gathering existing materials and research to use as inspiration. After collecting more than 16 mesmerising stories of female engineers, we whittled it down to 11 which formed the bulk of the narrative. 7 of which would span over four parts, allowing us to explore their most brilliant, brave and bold endeavours.

### ***How did you find the rehearsal process once the script was formed?***

Once the script was written and finalised the rehearsal process became more structured and organised. With the script acting as the foundation for our piece, other elements of the production began to fall into place. For example, the set could work in tandem with the narrative, costumes and props could be sourced and characters could be casted. Most importantly, our actors were able to focus on character arcs and nuances in order to give an authentic performance.

### ***What has been your favourite part of being a script writer?***

I have enjoyed exploring and researching these wonderful women. Learning about the likes of Hedy Lamarr and Emily Roebling has been a pleasure. I felt it to be my duty to give these wonderful women a voice; to explore their personalities, their struggles, and their triumphs. They are all truly an inspiration!

### ***Do you have a favourite scene?***

My favourite scene is Part I of Hedy Lamarr. We are introduced to a beautiful woman who cleverly escapes the confinement of married life in order to peruse a career in Hollywood. However, we soon find out she is not just “the most beautiful girl in the world”, she is a natural born genius.



# The Creative Process

## Designing the Production

Alongside generating material for the piece, our design team was always on hand to take the work and place it in the context of the final show. Ultimately an exciting, dynamic performance works on multiple levels, and the set, lighting and sound is what ties it all together. From the start of the creative process we were also thinking about music that could go with scenes, how we would use the set, or how it might be lit. Our design team has made sure that the performing was not separated from the technicalities.

## Interview with a Designer - Abbi Karitons

### ***What role have you taken in the designing of the production?***

I, alongside Amelia, have worked on the set design for the production. This included deciding on a thrust stage format, as well as what the set would look like. For example what colours would be used in the set and also where we could create levels through platforms and scaffolding.

### ***What was the creative process in designing the set? How did you decide what it would look like?***

I began by researching into what the show was going to be about; in this case 'women engineers'. From this stimulus I created mood boards of colours that I felt reflected this topic, for example industrial colours like bronze and copper. I then also looked at images of set designs of other shows to see what might inspire me. I then began sketching ideas of a set, combining all the images and ideas I had collated. After this process Amelia and I created a model box of what the stage would look like. This helped us visually experiment with how we could fill the stage, and make each part of the stage interesting as well as useful and effective for performers.

### ***What have you learnt from the process?***

I have learnt how important it is to keep organised. We, as set designers, are the first people to start planning what the show is going to look like because it takes us the longest to order and prepare everything. Furthermore I have found it challenging to keep on top of all the maths and measuring of the space! The exact measurements are so important, and sometimes it is something you forget about!

### ***What's your favourite part of the set?***

My favourite part of designing the set was the research and planning, because once you have the basic ideas it's so fun to see them start to come to life as you create them. Within the set itself my favourite part is the scaffolding and platforms, these are multipurpose and effective at allowing each scene to become a new place.

# The Creative Process

## Creating Interactive Theatre in Thrust

We decided to configure our production in thrust in order to break the fourth wall and involve our audience with the work happening on stage. Thrust enables our actors to interact directly with the audience and make them feel part of the action. This however came with its challenges, as our actors had to be much more spatially aware, as to not put their backs to many audience members. We would often have to block scenes multiple times in order to make sure all the audience would have a good view.

## Interview with a Performer - Maria North

### ***What challenges arose from performing in thrust?***

Performing in thrust staging has been difficult for me because I have had to learn to split my attention between three sides of the room. One of the key challenges in rehearsal therefore was directing our scenes within this staging, so all could be seen and heard. For example in ensemble scenes we would have to give each cast member a specific position or level so no audience member, or other cast member was blocked. Although this has been challenging, it has given us the opportunity to experiment with a variety of ways of performing, redirecting the choreography to the sides and creating a more exciting and aesthetic atmosphere on stage that is hopefully captivating!

### ***What have you most enjoyed about being a performer in SHE?***

As a Theatre and Performance student, I often find myself working in large groups, however, I believe that this is the biggest group that I have worked in so far and honestly, it has been the most enjoyable. Putting the show together has been a rewarding challenge. Perhaps most ...

rewarding as a performer is the individuality we have each been able to put into the show. All the cast, including myself have been able to put across our opinions and views. This means that our finished product contains a part of all of us, our blood, sweat and tears, and it has culminated in a performance we can cherish and experience together.

### ***What's your favourite scene and why?***

A memorable scene for me is where Emily Roebling, the woman who completes the building of the Brooklyn Bridge for her husband, is watching the workers from her bedroom. The aesthetics of this scene are empowering as we see Emily watching, from the highest point of the stage, the impending work that she will soon embark upon. For me this scene shows how the roles have reversed, and how a woman, even at that time, could become a leader in a male dominated field. Furthermore, the movement sequence in this scene by the workers is very effective; the power, strength and cohesion of the actions enforce the sheer collective effort of the workers then contrasted against their pain and weakness from cajun sickness.



# Some of Our Women Engineers



## Hedy Lamarr : 1914-2000

**Engineering Feat :** The frequency hopping system intended for the US navy during WW2. It was used to guide radio controlled missiles underwater in a way that was undetectable by the enemy. This technology set the foundations for bluetooth and wifi.

**Beauty and Brains:** She was a Hollywood actress and named “the most beautiful woman in the world”. When her Hollywood career dwindled she focused on her inventions.

**Quote :** “Any girl can be glamorous. All you have to do is stand still and look stupid”



## Grace Hopper : 1906-1992

**Engineering Feat :** Invented computer programming

**Success from an early age :** Got an early admission to Vassar college at the age of 17 to study mathematics and physics and earned a masters and PhD at Yale.

**Quote:** “If it’s a good idea, go ahead and do it. It’s much easier to apologise than it is to get permission”



### **Amy Johnson : 1903-1941**

**Engineering Feat :** She was the first British-trained woman ground engineer and the only woman in the world to do so at that time.

**Breaking Records :** She was the first woman to fly solo to Australia. She came home to the UK to a hero's welcome which culminated in her award of a C.B.E.

**Quote :** "Had I been a man I might have explored the Poles or climbed Mount Everest, but as it was my spirit found outlets in the air"



### **Josephine Cochrane : 1839-1913**

**Engineering Feat :** She invented the first commercially successful automatic dishwasher.

**Providing for Her Family :** Her husband left Josephine and her two sons an immense amount of debt from his alcoholism, so making a successful dish washer became a matter of survival for her family.

**Quote :** "I couldn't get men to do the things I wanted in my way until they had tried and failed on their own. Then they realised my way was the best way."



### **Emily Roebling : 1843-1903**

**Engineering Feat :** Responsible for guiding the construction and completion of the Brooklyn Bridge.

**More than just a Wife :** Her husband was the original chief of the project, but he fell ill in 1872 she served as his liaison with the engineering team. Over time she displayed such proficiency in the issues of construction, that many even concluded she was the chief engineer.

**Quote :** “I have more brains, common sense and know how generally than have any two engineers, civil or uncivil”



### **Mavis Batey : 1921-2013**

**Engineering Feat :** She was one of the leading codebreakers at Bletchley Park in 1939-1946. She broke enigma ciphers that led to the Royal Navy's victory over Italy in 1941, and crucially to the success of the D-Day landings in 1944.

**Saving England :** It is estimated that the work done at Bletchley park shortened the war in Europe by two years.

**Quote :** “There was a sense that we were doing something important. I am proud of what we did.”

# Curriculum and Skill Development

## KS3

As Drama is no longer an individual subject on the National Curriculum for KS3, the following pages are suggestions for how to explore our piece in the classroom. The aim being to touch upon key aspects of drama practice whilst using the content and themes of 'SHE'. All the activities suggested can of course be altered to the teacher's preference.

This pack will therefore look at activities for learning about :

- Biography in Theatre
- Devising
- Music
- Set Design

### Biography in Theatre

In *She* our piece was all based on real people and their lives. To this extent we had to undertake extensive research to gather material on each engineer. Furthermore as we then used this material in the performance, we had to find a way to do justice to the stories.

#### **Think :**

Get the students to think for 2-3 minutes about an interesting story from their own life. Remind them to think about choosing something that can become theatrical. When selecting stories to put in a piece it is important to choose what will captivate an audience member.

#### **Activity :**

Pair up the students and give them some time to tell each other their stories. Now each student must tell/perform the story their partner told them as their partner. Choose just a couple pairs to share. After this exercise as a reflection, ask the students to feedback how they felt having the responsibility to retell someone else's story authentically? Were they inspired by any aspect of their story? The idea here is to help the students understand the challenges behind telling someone else's story accurately as well as keeping it interesting.

**Progression :**

Now get the students to choose one of the women engineers above, or another character they remember from *She*, such as Washington, Emily Roebling's husband, or Henrietta Swans best friend Dorothy. Any character that stuck with them! Get the students to think about a moment of this characters life that they remember, or is written in the pack. Now ask a couple of students to perform as this character and talk about one of these moments.

For example if the student were to play Emily Roebling they might talk about building the Brooklyn Bridge.

This activity will extend the original in demonstrating how we can act as other people and still do their stories justice.

**Extra Task :**

This could also be taken into a characterisation workshop, where now the students have chosen a character and they know their story, you could get the students to walk around the space as this character. Thinking about

- class
- family
- lifestyle
- appearance

**Devising**

Our piece was devised from head to toe, whereby our creative process involved us taking the stories of these women and weaving them together for dramatic effect. Devising is a difficult task, but its opportunity for creativity can create great theatre.

**Think :**

Now splitting into small groups of 4/5 get the students to choose another one of the women engineers. Then allow them to choose their favourite part of this characters story. Discuss with them what part of a story would make a good scene, how they can fit everyone in the group into it, and would it be captivating to an audience?

**Activity :**

Get the students to each choose a character to play within the moment they have chosen. For example if they have chosen Amy Johnson, one student might be Amy and the others her best friends at University. Now get them to devise a scene, this can be based around the truth or an imagined scenario.



**Progression :**

Guide this process by giving them criteria they have to meet within the scene. For example

- everyone has to speak at least once
- a moment of dramatic silence
- adding the verbatim quote from the pack for that character
- add some narration

These can be altered accordingly to suit the lessons outcomes.

**Music**

Music was an imperative part of *She*. We had music underscoring many of the scenes, well as during transitions. Perhaps the most important part of our music use was setting the period of the scene.

**Think :**

Get the students to all sit in a space in the room with their eyes closed. You are now going to play them two pieces of music. However do not tell them what they are or where they are from, ask them to just think about the music and what it could be. To play the clips you will need access to YouTube in your classroom :

One is a track we used in our Amy Johnson scenes :

*'Amy - Jack Hylton & His Orchestra 1930'*

The other is a track from the Hedy Lamarr Scenes :

*'I've Heard That Song Before - Harry James & Helen Forrest'*

**Activity :**

Now DISCUSS the music with the students, the idea here is to teach them how music can change a scene, or set a scene. Here's some talking points :

- How are these songs different to music today?
- Is there a different period set by each song?
- How did the songs make you feel?
- What effect could these songs have on a scene?
- What atmosphere do the songs create?
- What effect does this have?

**Progression :**

Building on the devising activity earlier, get the students to go away and think about two contrasting songs that could underscore the scene they created. Act out the scene twice, playing the different song each time. Again Discuss the effect of this? Which song fits better? Does one create a different atmosphere to the other?

# Set Design

## Think :

Get the students to choose a character from *She*. But this time think about where this character lives, where are they from. What does it look like? In addition think about places they might go too. For example, Emily Roebling goes to the Brooklyn Bridge, or Henrietta Swan goes to the Observatory.

## Activity :

Now lead the students to start thinking about this in terms of a set. What kind of space would be needed to stage the characters story, what different locations need to be shown on stage? Would the scene remain in one location or would it need to also move to other places?

Now get the students to create a mood board. This is an activity that our set designers did at the beginning of their process! This can be a really fun creative activity, the students can use scrap material, colourful pens, sketches etc to create a mood board for their character's set. It should encapsulate what atmosphere the set will produce.

## Progression:

Now the students can take this a step further and do an actual sketch of their ideal set. They will need to think about:

- What configuration is the set in? In the round? Thrust? Proscenium arch?
- How many different locations are there going to be?
- What's on stage? A bed? Chairs? What will they add to the scene?

If you have the resources available you could even get all the students together to create a 3D set! Each student could bring in something to add to it.