




**nesta**

# Measuring gender imbalances in the creative industries

**Dr Cath Sleeman, Head of Data Visualisation**

AI and Audiovisual Archives event

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# Nesta is a global innovation foundation

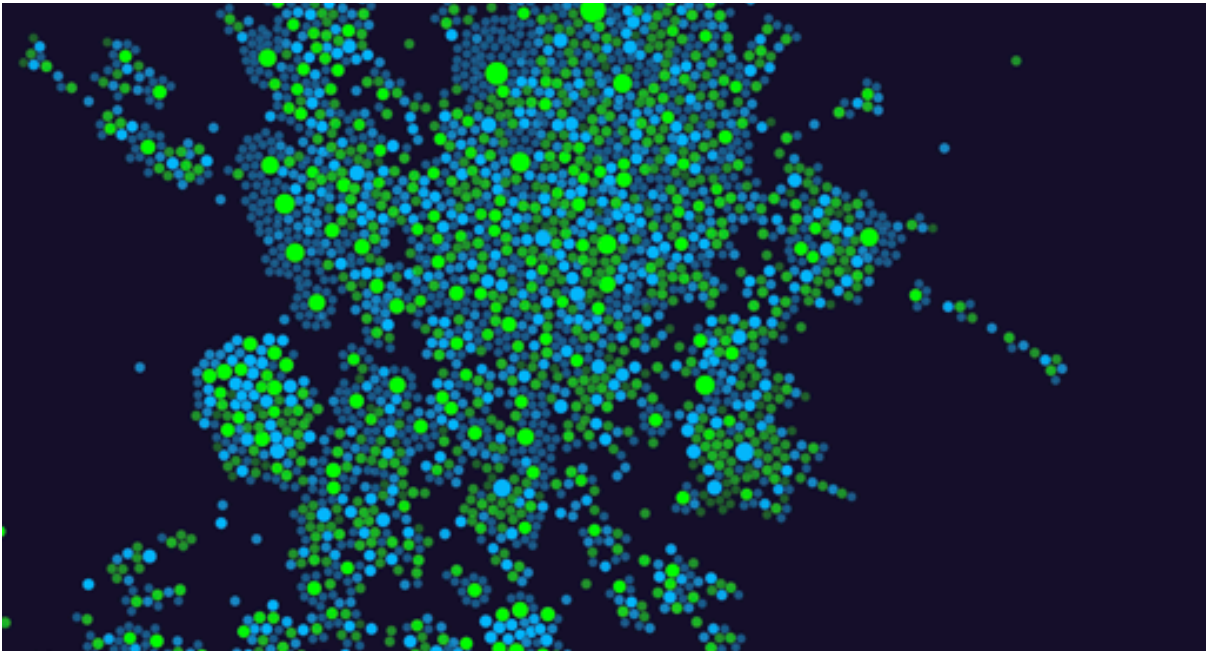
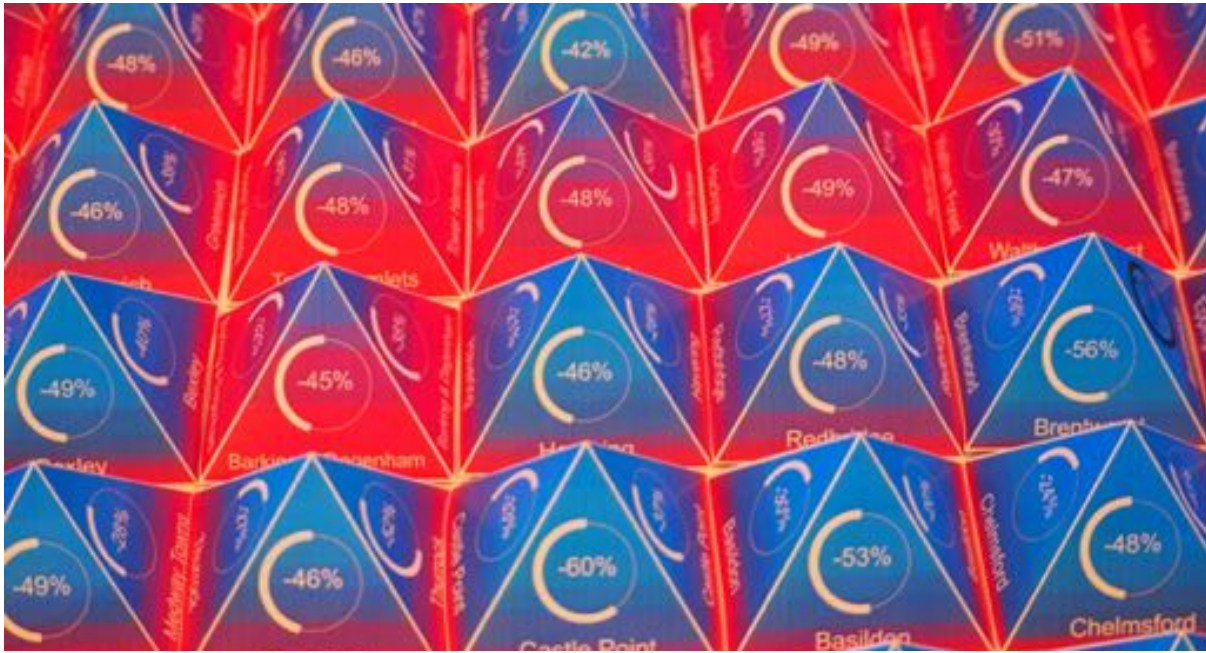
We back new ideas to tackle big challenges of our time, from the pressures of an ageing population to stretched public services and a fast changing jobs market.



How can we  
improve labour  
market  
information?

How can we improve  
the measurement of  
gender imbalances in  
the creative  
industries?





# What's the data gap?

# Quantitative analysis has tended to focus on surveys:

- Can be slow to deliver insights
- May not capture all aspects of gender balance

We're missing long-running & multi-dimensional measures of gender imbalances

# How can big data help?



Could we do  
more with  
our data?



THE DOCTOR  
It very nearly ate you for dinner.

CLARA  
Admit it. I totally saved your  
life.

THE DOCTOR  
It wasn't going to eat me.

CLARA  
Then I totally saved you from  
having to marry a giant sentient  
plant thing. Oh come on! The bit  
where I jumped over the side? That  
was amazing!

DOCTOR can't fight a small smile. It was

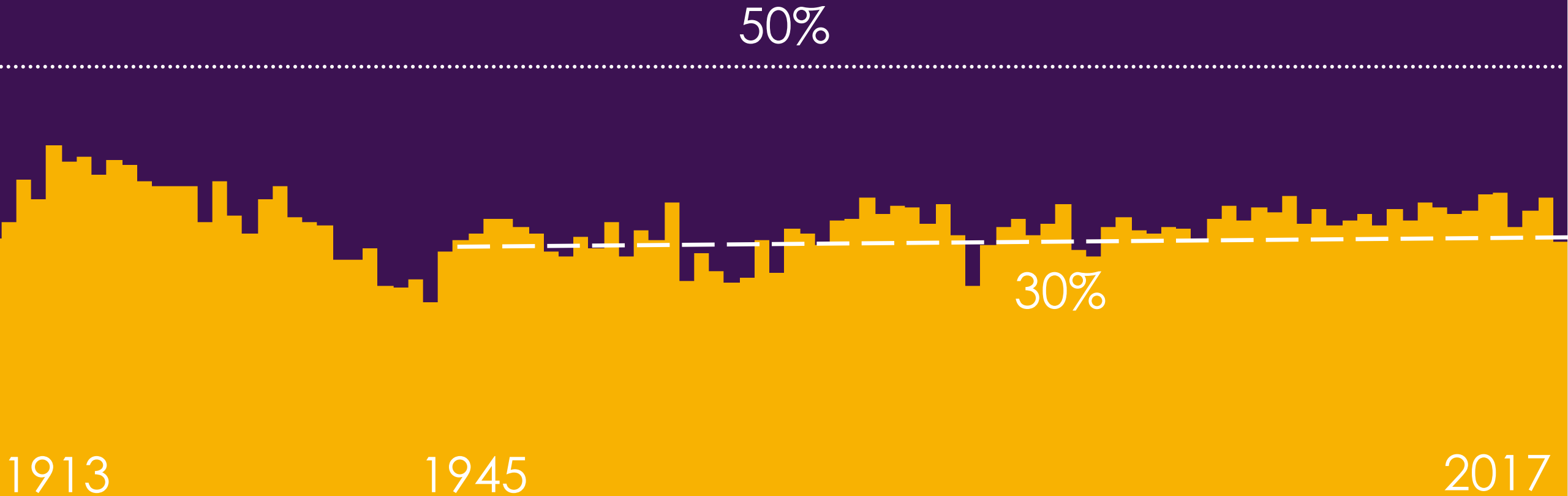


# Example 1

## The gender imbalance in UK film casts

70% men 30% women  
on-screen roles in 2017

# Percent of cast members who are women in UK films



# Percent of times character was played by a woman

1985+

100

75

50

25

0

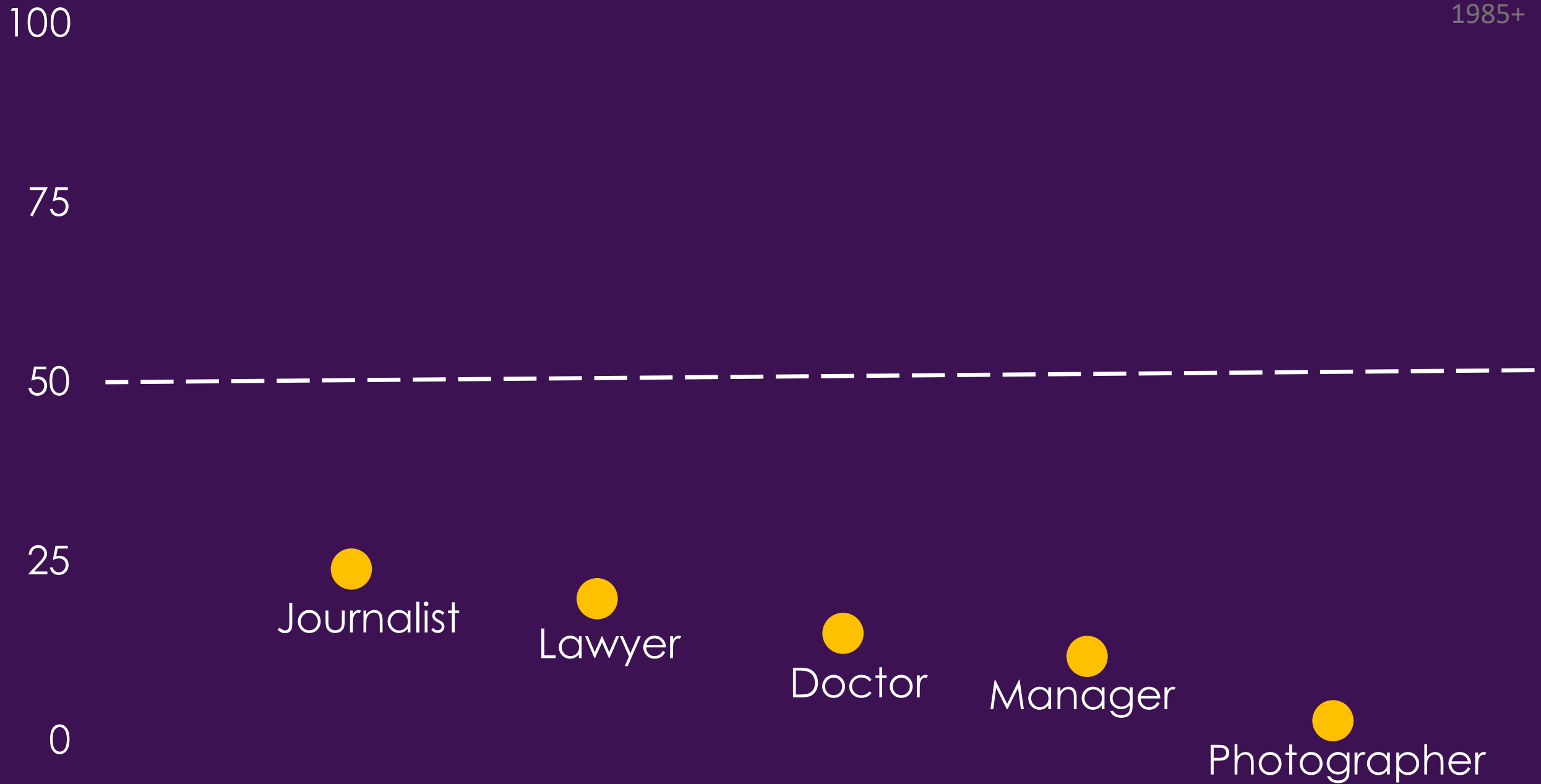
Journalist

Lawyer

Doctor

Manager

Photographer





# Average number of films

0

2

4

6

8

10

12

14

Actors who started in the 1940s



In the 1950s



'60s



'70s



'80s



'90s



2000s



Actors



Women



Men

KANTAR

information is  
beautiful  
awards 2019

WINNER

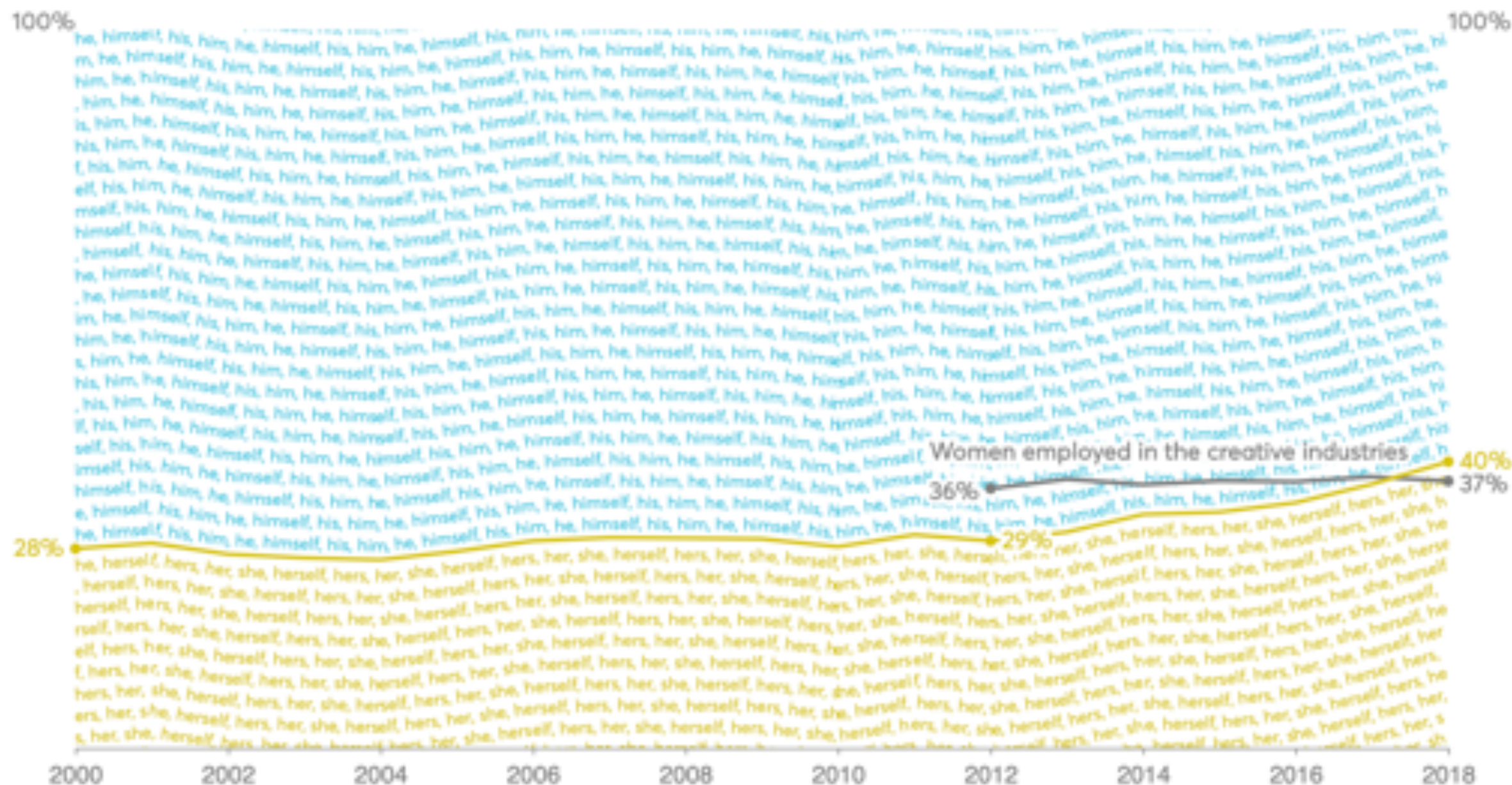
## Example 2

# She said more

Measuring gender imbalances in reporting on the creative industries

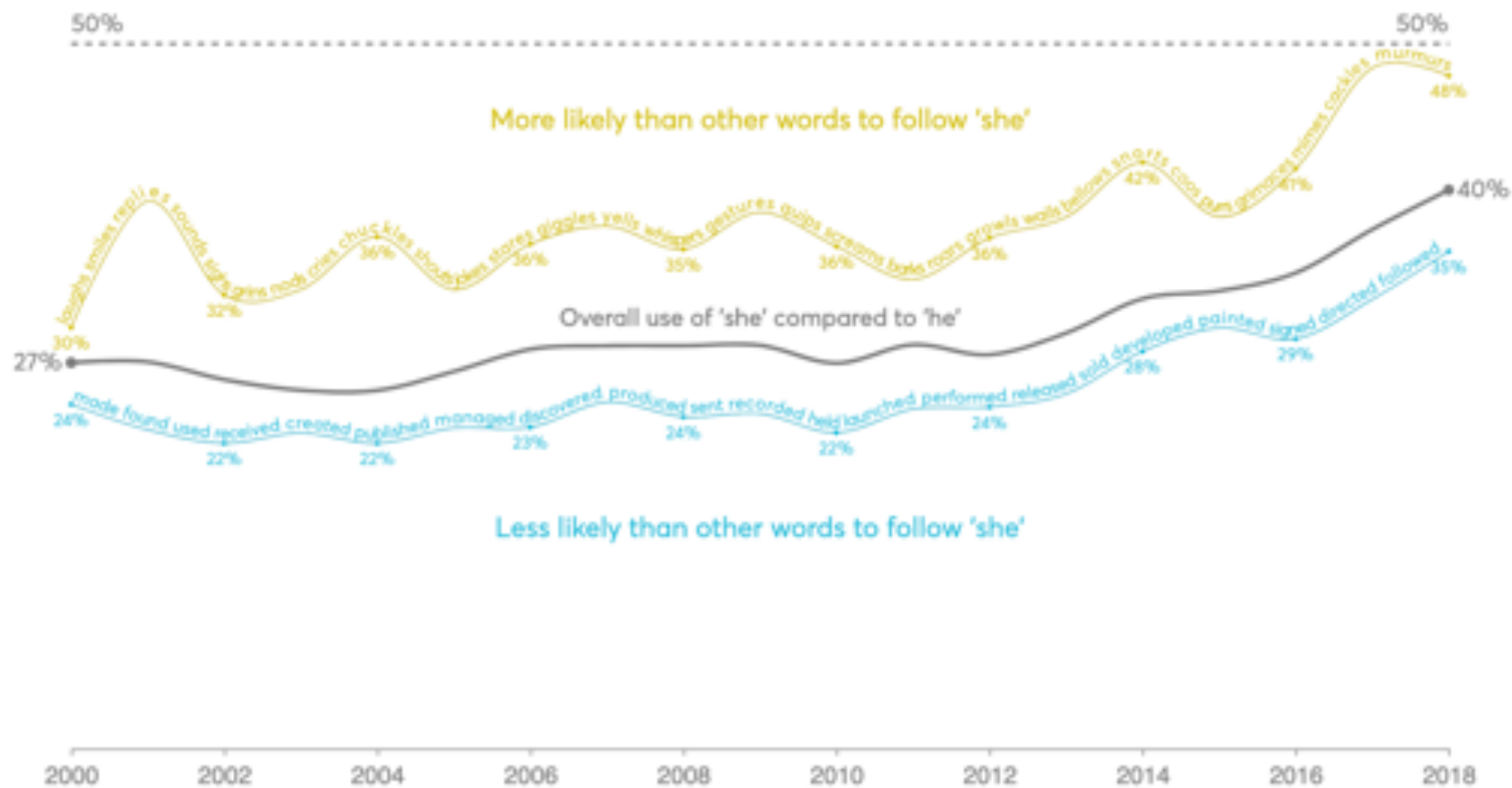


# Percentage of gendered pronouns that are **male** and **female**





## Groups of words that are **more** and **less** likely to follow 'she'



# Next project:

**Could computer vision inform our understanding of gender imbalances in television?**

**Data:** Programmes from the Learning on Screen archive

**Measure:** Compare on-screen time by male and female facial characteristics

**Previous studies:** Geena Davis with USC, INA

What are the limitations?



# Limitations of big data studies for detecting gender imbalances

1. Typically can only infer a fixed and binary gender
2. Difficult to know who has been left out

## **To mitigate these, we can:**

- Measure uncertainty where possible
- Openly discuss limitations in an accessible way
- View these studies as complements and not substitutes for existing research

Where do data gaps  
remain?

# Where do evidence gaps remain?

<b>Which questions lack quantitative studies?</b>	How did these gender imbalances emerge?	What does the gender mix look like <u>now</u> ?
<b>What are we missing?</b>	Panel data	Live and open tools

Example of up to date analysis plus panel data: <https://filmography.bfi.org.uk/>




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