

Who wrote the Jack the Ripper letters? A stylometric analysis

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The University of Sheffield

Whitechapel, London

27 Sept 1888
Dear Boss letter

7 Aug 1888:
Martha
Tabram

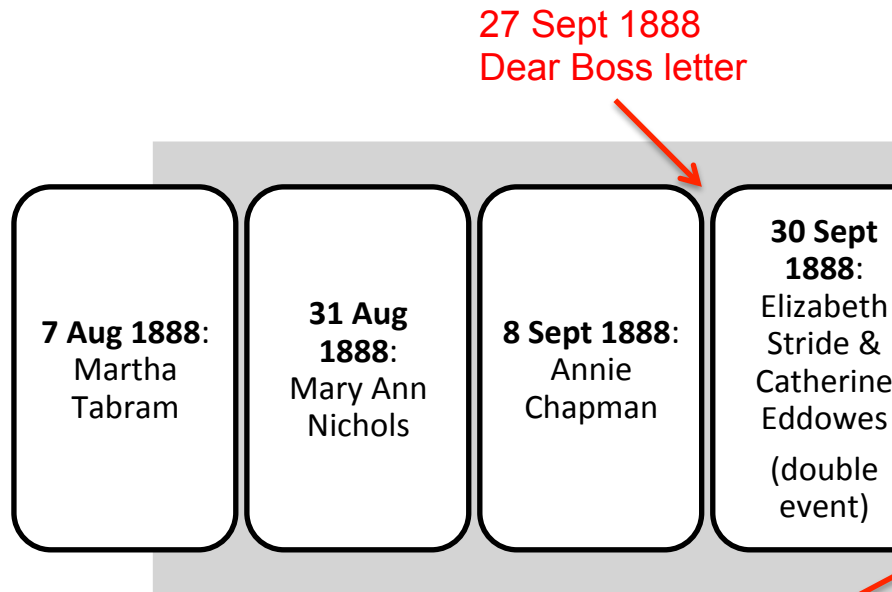
31 Aug
1888:
Mary Ann
Nichols

8 Sept 1888:
Annie
Chapman

yours truly
Jack the Ripper

25. Sept. 1888.
Dear Boss
I keep on hearing the police
have caught me. but they wont fix
me just yet. I have laughed when
they look so clever and talk about
being on the right track. That joke
about Leather Apron gave me real
fits. I am down on whores and
I shant quit ripping them till I
do get buckled. Grand work the last
job was. I gave the lady no time to
squeal. How can they catch me now.
I love my work and want to start
again. You will soon hear of me
with my gunny little games. I
saved some of the proper red stuff in
a ginger beer bottle over the last job
to write with but it went thick
like glue and I cant use it. Red
ink is fit enough. I hope ha ha.
The next job I do I shall clip
the lady's ears off and send to the

Whitechapel, London



1 Oct 1888
Saucy Jacky postcard

I was at coding
dear old Boss when
I gave you the tip
you'll hear about
saucy Jacky & work
to move on a double
event as time
running & squeals
a bit & didn't
finish straight
off. had no time
to get card for
police thanks
keeping last letter
back till I got
to work again
Jack

Dear Mr Williamson

At 5 minutes to 9 o'clock tonight we received the following letter the envelope of which I enclose by which you will see it is in the same handwriting as the previous communications.

"5 Oct 1888

Dear Friend

In the name of God hear me I swear I did not kill the female whose body was found at Whitehall. If she was an honest woman I will hunt down and destroy her murderer. If she ['was an honest woman' deleted] was a whore God will bless the hand that slew her, for the women of of [sic] Moab and Midian shall die and their blood shall mingle with the dust. I never harm any others or the Divine power that protects and helps me in my grand work would quit for ever. Do as I do and the light of glory shall shine upon you. I must get to work tomorrow treble event this time yes yes three must be ripped. will send you a bit of face by post I promise this dear old Boss. The police now reckon my work a practical joke well well Jacky's a very practical joker ha ha ha Keep this back till three are wiped out and you can show the cold meat

Yours truly

Jack the Ripper"

Yours truly

T.J. Bulling

5 Oct 1888
Moab and Midian letter

2 Oct 1888:
The
'Whitehall
mystery'

Whitechapel London

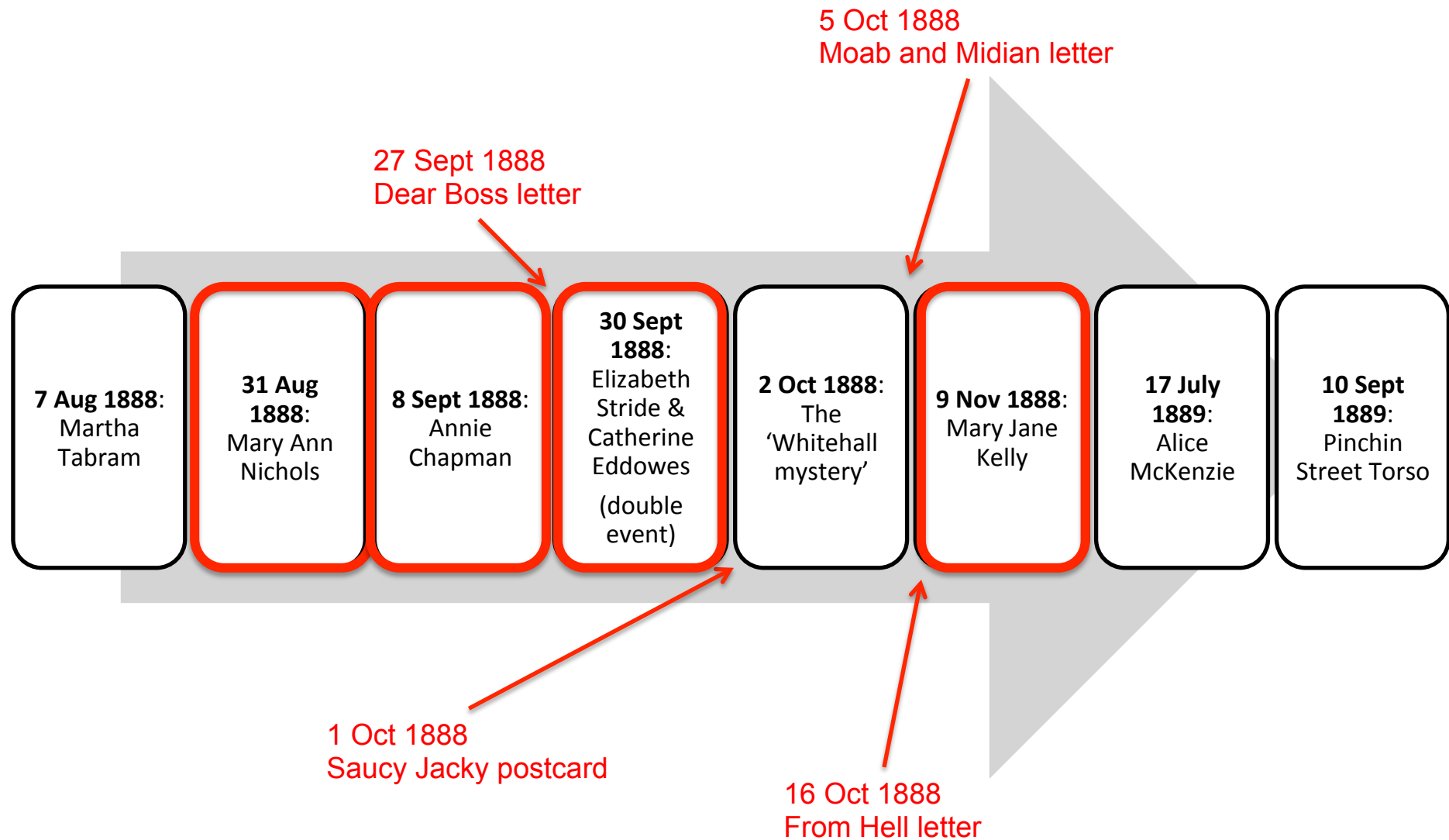
From hell
Mr Sugar
Sov I send you half the
Kidme I took from one woman
I named it for you to other piece
fied and at it was very nice I
may send you the bloody knay that
took it out if you only wate a what
longer.
Signed Catch me when
you can
Mister Luck.

5 Oct 1888
Moab and Midian letter

2 Oct 1888:
The
'Whitehall
mystery'

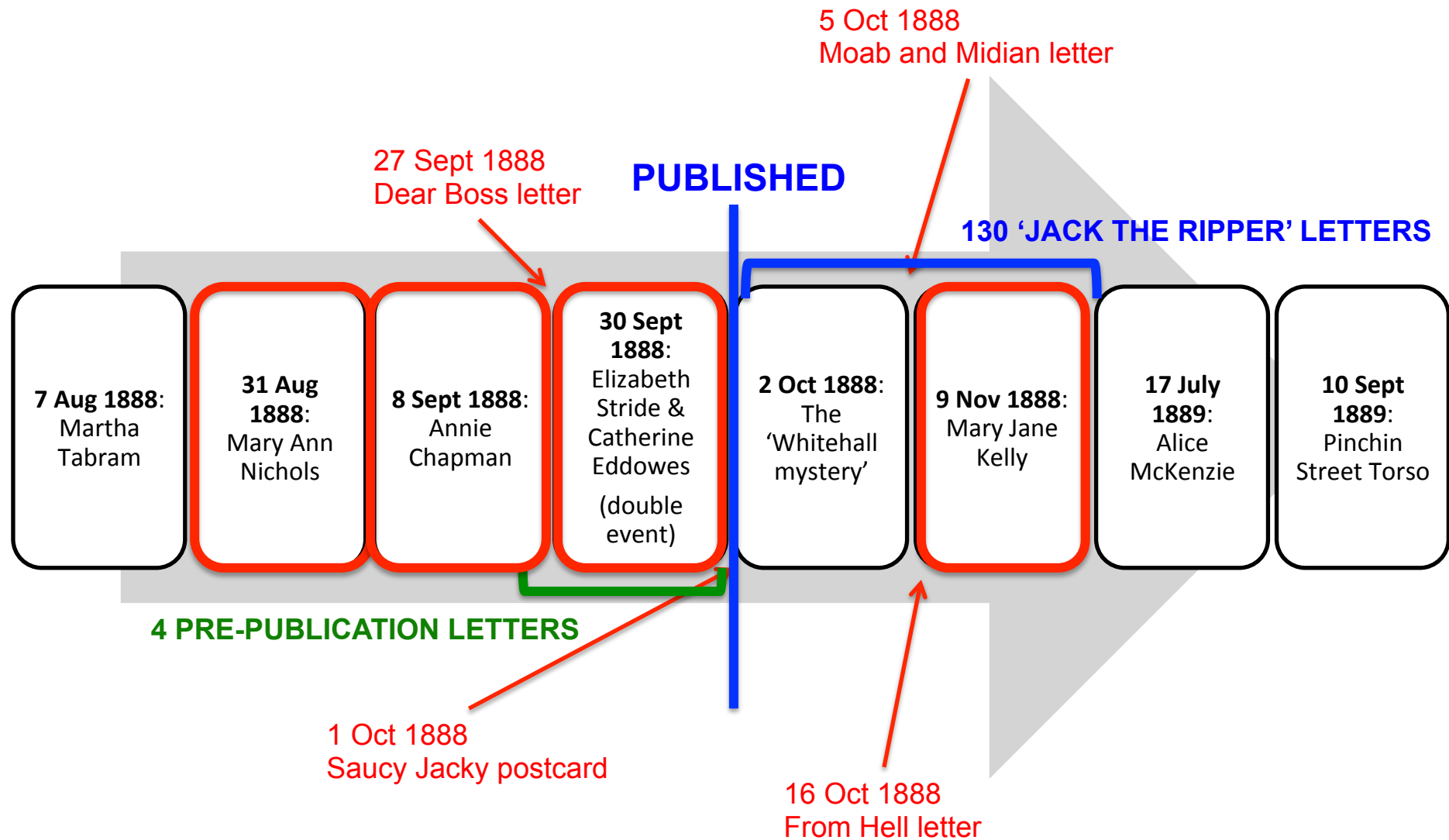
16 Oct 1888
From Hell letter

Whitechapel, London



Keppel R., Weis J., Brown K., Welch K. (2005). The Jack the Ripper murders: a modus operandi and signature analysis of the 1888–1891 whitechapel murders. *Journal of Investigative Psychology and Offender Profiling* , 2: 1–21.

Whitechapel, London



209 Jack the Ripper letters, from 24th Sept 1888 until 14th Oct 1896

RIPPER REVEALED Clues in newly-uncovered painting could prove the ARTIST is Jack the Ripper

A new book claims a painting by a Victorian artist - and Ripper suspect - contains clues that allude to his role in the murder of five prostitutes in East London in 1888

EXCLUSIVE

By Annabel Murphy

31st August 2018, 4:30 pm | Updated: 31st August 2018, 7:27 pm



24
COMMENTS

CLUES hidden in a newly-uncovered painting could prove that the artist behind it is infamous serial killer Jack the Ripper.



Maria Coroner 21 years old

Charged with sending two letters signed as 'Jack the Ripper'

She had written two letters of this character, as she admitted when apprehended, one being addressed to the chief constable and the other to a local newspaper. On searching the girl's lodging the police found copies of the letters. The prisoner excused her foolish conduct on the ground that "she had done it in a joke"

The enterprising journalist theory

The Littlechild letter

8, The Chase
Clapham Common S.W.,
23rd September 1913

Dear Sir,

I was pleased to receive your letter which I shall put away in 'good company' to read again, perhaps some day when old age overtakes me and when to revive memories of the past may be a solace.

Knowing the great interest you take in all matters criminal, and abnormal, I am just going to inflict one more letter on you on the 'Ripper' subject. Letters as a rule are only a nuisance when they call for a reply but this does not need one. I will try and be brief.

With regard to the term 'Jack the Ripper' it was generally believed at the Yard that Tom Bullen of the Central News was the originator, but it is probable Moore, who was his chief, was the inventor. It was a smart piece of journalistic work....

Research questions

Author clustering

- 1) Is there linguistic evidence that any of the four pre-publication texts were written by the same person?
- 2) If there is such evidence, is there any evidence that connects any of the post-publication texts to this person?

Methodology

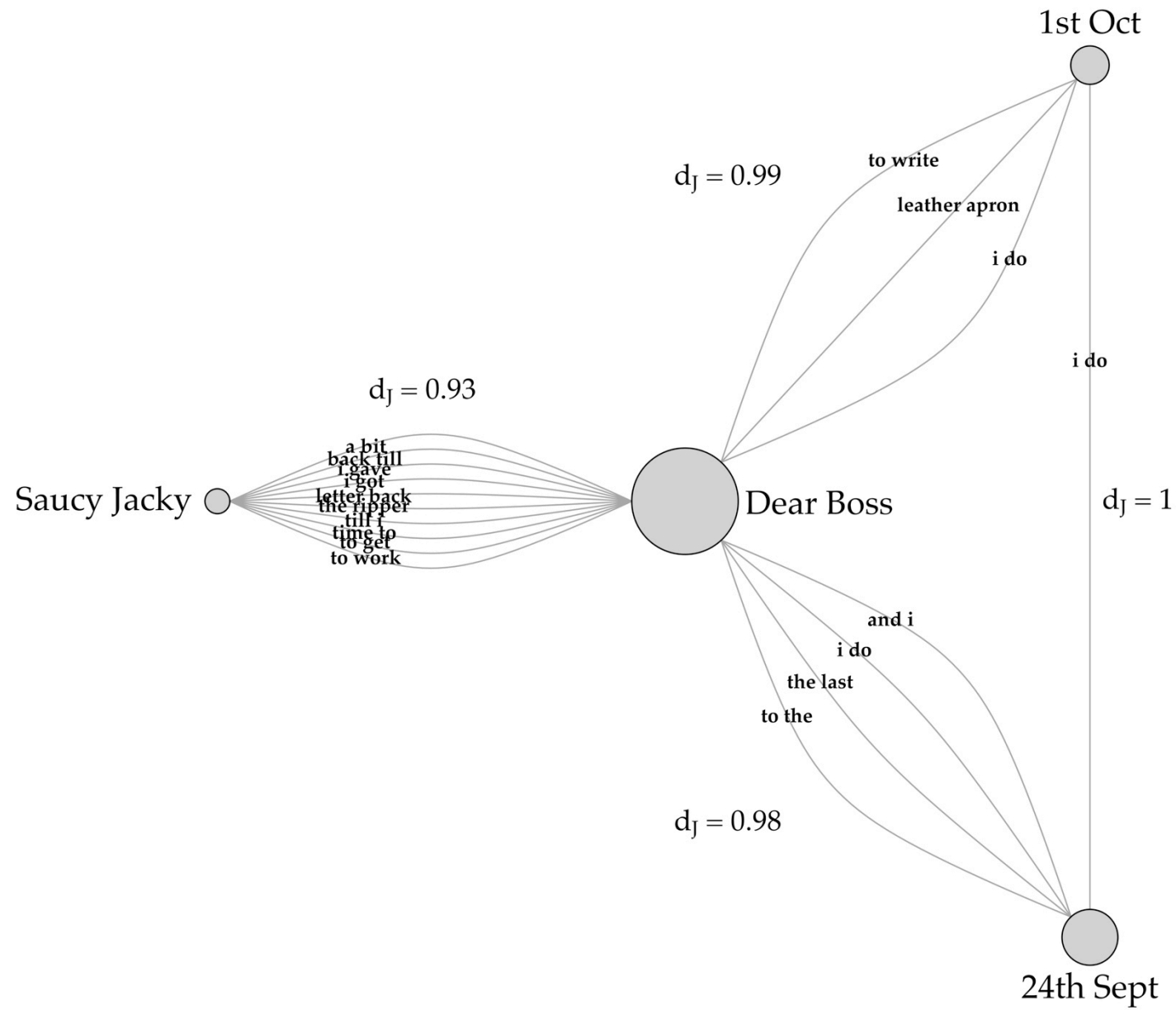
Average text length of the Jack the Ripper corpus: 83 tokens (min. 7, max. 648)

$$d_J(A, B) = 1 - \frac{|A \cap B|}{|A \cup B|}$$

Text A = {the cat, cat sat, sat on, on the, the mat}

Text B = {the dog, dog sat, sat on, on the, the mat}

$$d_J(A, B) = 1 - (3/7) = 0.57$$



The 132 million word 19th century section of the Corpus of Historical American English (COHA);

The 34 million word Corpus of Late Modern English Texts 3 (CLMET3), spanning from 1710 to 1920;

The 19 million word Extended Old Bailey Corpus (EOBC), including the proceedings of the Old Bailey from 1720 to 1913.

1	<i>till I do</i> [_{NP} a bit more work] (Dear Boss) <i>number one squealed</i> [_{ADVP} a bit] (Saucy Jacky)	
2	[_{NP} I] [_{VP} gave [_{NP} the lady] [_{NP} no time to squeal]] (Dear Boss) [_{NP} I] [_{VP} gave [_{NP} you] [_{NP} the tip]] (Saucy Jacky)	
3	[_{NP} I] [_{VP} got [_{NP} all the red ink] [_{Part} off]] (Dear Boss) <i>till</i> [_{NP} I] [_{VP} got [_{INFCL} to work again]] (Saucy Jacky)	
4	<i>I want</i> [_{INFCL} to get [_{INFCL} to work]] (Dear Boss) <i>had not time</i> [_{INFCL} to get [_{NP} ears]] (Saucy Jacky)	
5	[_{SUB} till] [_{CL} [_{NP} I] [_{VP} do get buckled]] (Dear Boss) [_{SUB} till] [_{CL} [_{NP} I] [_{VP} do a bit more work]] (Dear Boss) [_{SUB} till] [_{CL} [_{NP} I] [_{VP} got to work again]] (Saucy Jacky)	Both users of <i>till</i> as opposed to <i>until</i>
6	[_{NP} no time [_{INFCL} to squeal]] (Dear Boss) <i>had not</i> [_{NP} time [_{INFCL} to get ears]] (Saucy Jacky)	10-18 per million words
7	<i>I want to get</i> [_{INFCL} to work] (Dear Boss) <i>till I got</i> [_{INFCL} to work again] (Saucy Jacky)	Probably distinctive
8	[_{VP} keep [_{NP} this letter] [_{PART} back] [_{SUBCL} till I do]] (Dear Boss) <i>thanks for</i> [_{VP} keeping [_{NP} last letter] [_{PART} back] [_{SUBCL} till I got to work]] (Saucy Jacky)	

[letter back till I] is virtually unique to these two texts

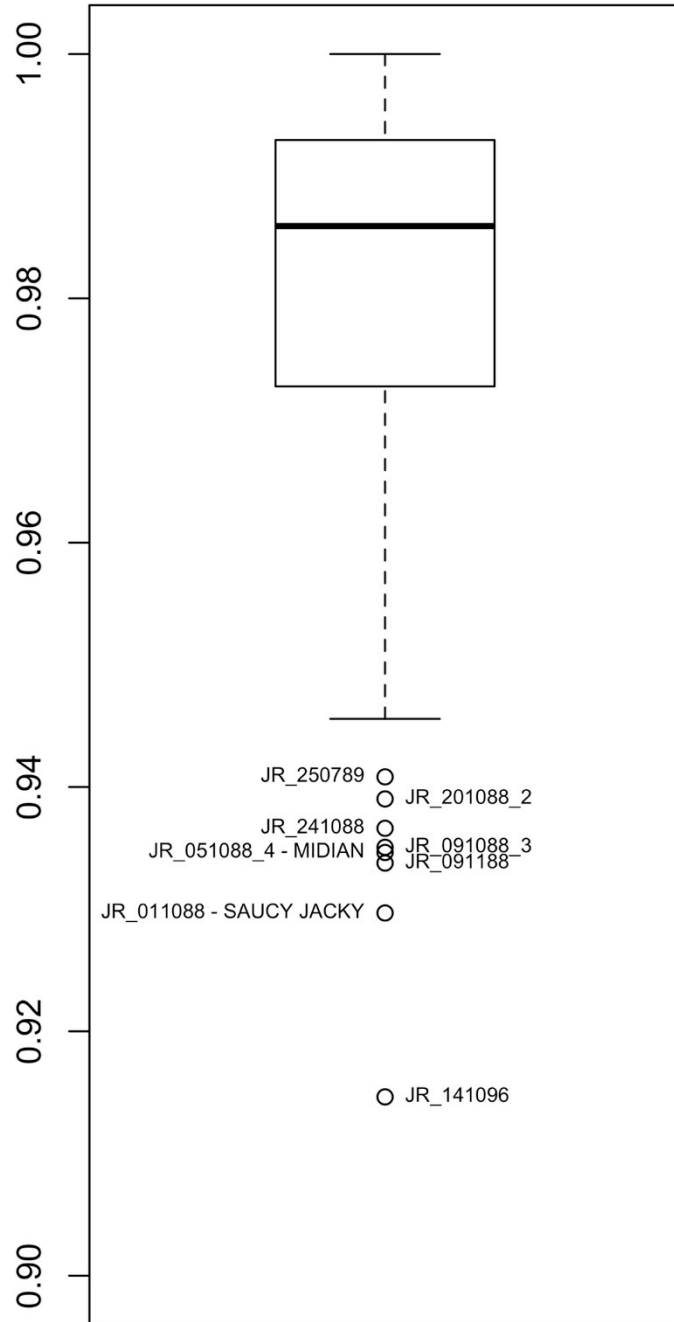
Research questions

1) Is there linguistic evidence that any of the four pre-publication texts were written by the same person?

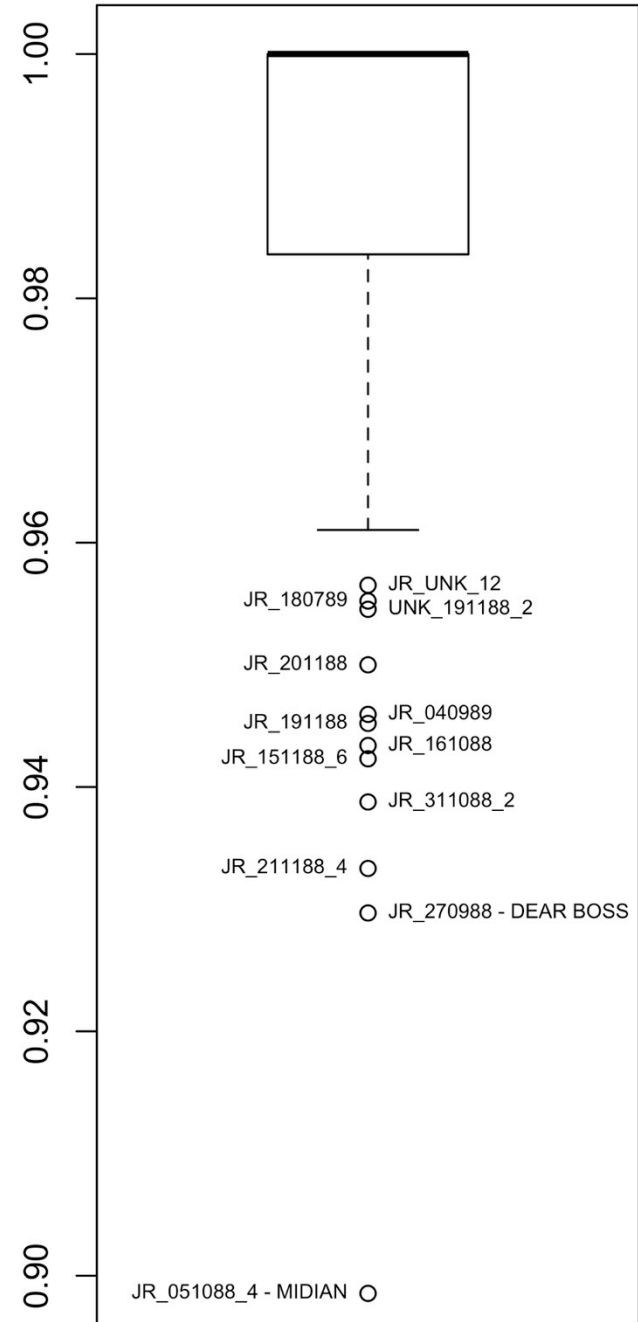
There is very solid linguistic evidence that *Dear Boss* and *Saucy Jacky* were written by the same person

2) If there is such evidence, is there any evidence that connects any of the post-publication texts to this person?

Dear Boss



Saucy Jacky



1	till I do [NP a bit more work] (Dear Boss) number one squealed [ADVP a bit] (Saucy Jacky) will send you [NP a bit of face] by post (Midian)	
2	I love [NP my work] (Dear Boss) The police now reckon [NP my work] a practical joke (Midian)	14 JR texts
3	you ll hear about [NP [NP saucy Jacky] [Gen s] [N work]] (Saucy Jacky) well well [NP Jacky] [VP 's [NP a very practical joker]] (Midian)	
4	ripping them till [NP I] [VP do [VP get buckled.]] (Dear Boss) The next job [NP I] [VP do] I shall clip (Dear Boss) [NP I] [VP do] a bit more work (Dear Boss) Do as [NP I] [VP do] and the light of glory (Midian)	
5	I keep on hearing [NP the police] have caught me (Dear Boss) and send to [NP the police officers] (Dear Boss) [NP The police] now reckon (Midian)	
6	[NP [ADJ Grand] [N work]] the last job was (Dear Boss) helps me in my [NP [ADJ grand] [N work]] (Midian)	3 JR texts
7	is fit enough I hope [INTJ ha. ha.] (Dear Boss) They say I'm a doctor now [INTJ ha ha] (Dear Boss) Jacky's a very practical joker [INTJ ha ha ha] (Midian)	8 JR texts
8	I wasnt coddling [NP dear old Boss] (Saucy Jacky) I promise this [NP dear old Boss] (Midian)	55 JR texts
9	[VP keep [NP this letter] [PART back] [SUBCL till I do]] (Dear Boss) thanks for [VP keeping [NP last letter] [PART back] [SUBCL till I got to work]] (Saucy Jacky) [VP Keep [NP this] [PART back] [SUBCL till three are wiped out]] (Midian)	
10	[CL ... [NP saucy Jacky s work] [ADVP tomorrow]] [NP double event] [NP this time] (Saucy Jacky) [CL I must get [INFCL to work] [ADVP tomorrow]] [NP treble event] [NP this time] (Midian)	

[event this time]
0 pmw

[work tomorrow]
0.05 pmw

Research questions

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There is very solid linguistic evidence that *Dear Boss* and *Saucy Jacky* were written by the same person

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There is some evidence that *Moab and Midian* was also written by this same person

Conclusions

New evidence for the Jack the Ripper case. Historians should evaluate the implications.

“This communication [Moab and Midian], if correctly attributed to the same source as the others [Dear Boss and Saucy Jacky], certainly tends to detract from the apparent veracity of its predecessors”

(Evans & Skinner 2001: 38)

The question is not

‘who was Jack the Ripper?’

but

‘who created Jack the Ripper?’

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You can download the Jack the Ripper
corpus, these slides, and find a link to the
article on my website