The rhetoric of recessions: how British newspapers talk about the poor when unemployment rises, 1896-2000*

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Abstract:

Recessions appear to coincide with an increasingly stigmatising presentation of poverty in parts of the media. Previous research on the connection between high unemployment and media discourse has often relied on case studies of periods when stigmatising rhetoric about the poor was increasing. We build on earlier work on how economic context affects media representations of poverty by creating a unique dataset that measures how often stigmatising descriptions of the poor are used in five centrist and right-wing British newspapers between 1896 and 2000. Our results suggest stigmatising rhetoric about the poor increases when unemployment rises, except at the peak of very deep recessions (e.g. the 1930s and 1980s). This pattern is consistent with the idea that newspapers deploy deeply embedded Malthusian explanations for poverty when those ideas resonate with the economic context, and so this stigmatising rhetoric of recessions is likely to recur during future economic crises.

INTRODUCTION

The global financial crisis of 2008 seemed to coincide with a rise in stigmatising rhetoric about people in poverty and welfare recipients across a range of print and television media outlets (Harkins and Lugo-Ocando, 2016; Tyler, 2008, 2013). This language legitimised welfare retrenchment by 'othering' (Lister, 2015) people in poverty and representing them as part of an out-group who were lazy, immoral, and living fraudulently at the expense of hard-working taxpayers (Jensen, 2014). Anti-welfare narratives permeated public discourse over this period and

^{*}Replication materials are available here: https://github.com/asreeves/rhetoric-recessions

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in some cases even had a demonstrable impact on attitudes toward welfare recipients (Reeves and de Vries, 2016).

This latest crisis is one recent example of how parts of the media stigmatise the poor during periods of rising unemployment. A number of studies have argued that media rhetoric about the poor responds to macroeconomic conditions, becoming more stigmatising when times are hard (Golding and Middleton, 1982; Macnicol, 1987). However, the existing quantitative evidence linking economic crises and newspaper rhetoric about the poor remains limited. Existing work relies on time-consuming hand-coding (Gilens, 1996; Misra et al., 2003), which limits the ability of researchers to examine long term trends in the language newspapers use to describe the poor. We know of no quantitative studies that investigate whether the prevalence of stigmatising language about the poor is affected by underlying economic conditions.¹ Case studies have generated crucial insights into how the print media frame poverty during economic downturns and periods of high unemployment but they have done so by examining precisely those periods in which stigmatising rhetoric increased. This logic of case selection may inadvertently overlook periods when, for example, unemployment rises but there is no change in stigmatising rhetoric (Deacon, 1976).

We address this gap in research on the link between economic crises and newspaper rhetoric about poverty by drawing on a unique dataset measuring how often five right-wing and centrist British newspapers and periodicals use stigmatising language about people in poverty throughout the twentieth century (1896-2000). We find that stigmatising rhetoric about the poor becomes more common when unemployment increases, but this association weakens when unemployment rates are especially high (>10%), such as during the 1930s and the 1980s.

Outside these exceptional periods, we conclude that British centrist and right-wing newspapers deploy deeply embedded Malthusian anxieties about the behaviour of the poor when unemployment is rising. In doing so they draw on a powerful set of ideas to explain an economic phenomenon that by itself might threaten the hegemony of individualistic interpretations of unemployment and poverty. Adopting an historical perspective reveals how deeply embedded ideas, such as Malthusian explanations for poverty, are deployed when they resonate with the structural context. Media stigmatisation of the poor following the global financial crisis was consistent with how our sample of newspapers responded to changing economic conditions across the twentieth century.

RECYCLING MALTHUS: MEDIA RESPONSES TO HIGH UNEMPLOYMENT IN HIS-TORICAL CONTEXT

While the media reaction to the global financial crisis in the UK intensified anti-welfare rhetoric (Jensen, 2014; Jensen and Tyler, 2015), such concerns about the numbers and morality of the poor and the unemployed are not new, and can be traced back over many centuries (Day, 2001;

¹Rose and Baumgartner (2013) use a similar methodology to our own. However, their study of how poverty is framed in the US covers a substantially shorter time period (48 years vs 105 years in our study), and focuses on the consequences rather than the determinants of media rhetoric about the poor.

Welshman, 2007).² Thomas Malthus' Essay on the Principle of Population (2008), first published in 1798, has had an enormous influence on how poverty is understood in British society (Golding and Middleton, 1982; Harkins and Lugo-Ocando, 2016; Macnicol, 1998).

Malthus argued that providing welfare is counterproductive because it breaks the natural check that starvation places on the numbers of the poor. In his view, the poor would not work if they are not required to do so to survive, and so providing them with food would erode their work ethic. Furthermore, their inability to exercise sexual restraint means that their numbers would inexorably increase, leading to collective immiseration and eventual societal collapse. When people refuse to work, unemployment rises, and so rising unemployment becomes a symptom of the moral decay that will make societies unsustainable, unless action is taken to reduce welfare uptake and dis-incentivise welfare dependency. To this end Malthus argued that welfare receipt should be stigmatised: 'hard as it may appear in individual instances, dependent poverty ought to be held disgraceful' (Malthus, 2008: III.VI.5).

Malthusian ideas have had a profound influence on public and policy discourse for nearly 200 years, shaping the Poor Law debates of the 1830s (Malthus, 2008; Polanyi, 2002), the welfare reforms of the 1980s and 1990s (Somers and Block, 2005), and austerity policies following the Great Recession (Harkins and Lugo-Ocando, 2016; Jensen and Tyler, 2015).

Malthus's influence can be clearly seen in media responses to unemployment. Public debates about poverty during the 1890s and early 1900s – an economically turbulent period when unemployment fluctuated wildly – were dominated by concerns about the spread of a 'degenerate nature' among the worst off in society, the 'social residuum' or 'unemployables' (Welshman, 2007: 2, 21; see also Day, 2001). In 1894, only a year after the peak of a recession, Geoffrey Drage (Secretary to the Labour Commission) argued that unemployment was mostly attributable to 'faults of character – habits of intemperance, idleness, or dishonesty' (Drage, 1894: 142).

When the Great Depression hit, parts of the press blamed 'dole' abusers for the country's economic difficulties rather than speculators or financiers (Golding and Middleton, 1982 Deacon, 1976). In August 1931, The Daily Telegraph called on the government to 'not be moved by the threatening invective of those who... [cry] "Hands off our dole". The government cut unemployment benefit by 10%.

Between 1973 and 1976, a moral panic about welfare fraud coincided with a doubling of unemployment rates from 1.9% to 3.9%. On 15 July 1976, the Daily Express' front page read 'Get the Scroungers!' This war on benefits cheats was widespread enough that around 30% of all social policy-related news stories in 1976 were concerned with welfare abuse. Such stigmatising rhetoric punctured the thin 'veneer of an apparent "welfare consensus" that had existed since WWII (Golding and Middleton, 1982) and legitimised major cuts to public spending.

²Demonisation of the poor in Britain goes back at least as far as the fifteenth century (Golding and Middleton, 1982). We focus on debates from about 1880 onwards in this paper because our data begins in 1896.

IDEATIONAL EMBEDDEDNESS AND THE MEDIA

These historical episodes make it clear that the print media has repeatedly played a crucial role in framing recessions in Malthusian terms, raising the question about why journalists recurrently deploy this language amidst rising unemployment. Part of the explanation seems to be that Malthusian ideas have been 'ideationally embedded' in the culture of Anglophone countries: they have become central features of the narratives and explanatory systems that social actors use to explain the world, often without realising their source (Somers and Block, 2005: 264). The success of Malthusian explanations of poverty is rooted in the capacity of this theory to make itself true by changing the features of the world that appear salient to people, including journalists (Bourdieu, 1998: 95). For example, living in a society where Malthusian explanations are central to how people understand poverty means people can now see the perverse effects of welfare almost everywhere they look. Despite the fact that there are vanishingly few people who actually refuse to work, the dominance of the Malthusian narrative makes it possible for people to believe that such behaviour is commonplace (Macdonald et al., 2014). By 'making themselves true', Malthusian ideas have become a form of common sense, accepted across society. So deeply embedded are these narratives in the Anglophone world that even those in poverty often deploy such images and tropes (Shildrick and MacDonald, 2013).

From this perspective, journalists are not the sole creators of stigmatising rhetoric, they are simply one set of actors who are 'engaged in the production and maintenance of meaning' and who are part of a discourse that renders some kinds of occurrences more meaningful than others (Benford and Snow, 2000). Like politicians and the general public, journalists deploy Malthusian ideas because they are engaged in a process of reproducing and recirculating widely accepted ways of understanding the social world (Couldry and Hepp, 2016). Journalists also possess a high degree of power to shape public opinion and government policy through the way they deploy these discourses in framing the issues of the day.³ Therefore, it is worth considering how journalists' relationship to their readers, and the economic context, may make them more or less likely to draw on Malthusian explanations for poverty.

Why newspapers use Malthusian ideas in recessions

Whatever their goal or agenda, journalists need to effectively communicate with their readers. To do so, journalists draw on evocative and recognisable tropes, metaphors, or images. As described above, Malthusian ideas provide a rich and compelling set of narratives journalists can use to frame their explanations of social phenomena (Gamson and Lasch, 1983; McKendrick et al., 2008).⁴ Malthusian ideas will not be ever-present in media discourse, rather, journalists are more likely to deploy them when they resonate most strongly with readers' experiences and the broader context (Benford and Snow, 2000; Gamson, 1992). Rising unemployment is a set of circumstances that Malthusian ideas explain well by providing a simple theory whereby an

³For detail about the processes by which individuals draw on media framings to make their minds up about social and political issues see Gamson (1992).

⁴This account abstracts from a number of important aspects of media production, such as the role of newspaper owners or editors. This is not because we believe these aspects are unimportant but rather that they are not central to argument we are making in this paper. We return to this issue in the discussion.

increasing population in poverty is a natural result of the immorality of the poor (Somers and Block, 2005). As a result, when unemployment rates go up, stigmatising rhetoric in the print media should increase because this is when Malthusian ideas are at their most relevant as a way of making sense of changing economic conditions. By contrast, when unemployment declines, and the Malthusian explanation of poverty becomes less relevant to the circumstances, stigmatising rhetoric should decline as well.

This 'Malthusian' theory has never been tested quantitatively. Thus it is also possible that when unemployment is rising it becomes harder to maintain that 'faults of character' (Drage, 1894) are the cause of joblessness, and as a result structural explanations of poverty may resonate more strongly with economic context and newspaper readers' experiences (van Oorschot, 2006, Benford and Snow). From this perspective, when unemployment rates go up stigmatising rhetoric in the media will decline, reflecting the increased resonance of structural explanations of poverty.

The central question of this paper is thus whether newspapers use stigmatising rhetoric about people in poverty more frequently when unemployment rates go up, or when they decline. Our analysis addresses this question by drawing on a novel data set covering the entire twentieth century, allowing us to connect macroeconomic conditions with how newspapers talk about people living in poverty.

DATA AND METHOD

STIGMATISING RHETORIC IN NEWSPAPERS

We construct a unique data set measuring the frequency of stigmatising language about people in poverty over the twentieth century. The Gale NewsVault database contains archives of five British newspapers from their inception to the present day: The Mail (daily and Sunday editions), The Telegraph (daily and Sunday editions), The Times (daily and Sunday editions), Financial Times, and the Economist. While there is some diversity among these papers in their political alignment and readership demographics, they are all are predominantly centrist or right-wing in orientation and are read by a largely middle-class audience (see Web Appendix 1 for further information). Unfortunately, the Gale NewsVault database does not contain any left-wing newspapers. As a result, we are unable to say whether left-wing newspapers are more likely to use stigmatising language when unemployment increases.

We restrict our sample to 1896-2000, when all five newspapers are available. To calculate the frequency of stigmatising language about people living in poverty we utilise Gale NewsVault's search function. This returns the frequency of articles containing specific terms by year.⁵

⁵For evidence that our strategy of counting word usage in newspapers is a valid measure of newspaper coverage of current events see Lansdall-Welfare and colleagues' (2017) analysis of a database of British newspapers from 1800-1950.

Word Choice

Stigmatising language about the poor frames people in poverty as members of an outgroup and associates poverty with negative stereotypes asserting immoral behaviour. The specific language used to describe the poor has changed substantially over time; words used frequently in one period, such as 'unemployables' or the 'residuum' in the late 19th century, later drop out of common usage. Political entrepreneurs create new terms, such as the 'underclass' in the 1980s, to express a set of ideas that remains fairly static (Gamson and Lasch, 1983; Welshman, 2007). We select words following earlier research on how poverty is presented in the media (Day, 2001; Golding and Middleton, 1982; Tyler, 2013; Welshman, 2007), choosing a large number of words (28) on the assumption that historical idiosyncrasies in usage should average out. Our set of words includes terms which are used to describe people in poverty in a stigmatising or demeaning manner such as 'scrounger', 'skiver', or 'underclass' (Golding and Middleton, 1982). We also use terms that denote negative attributes that are commonly asserted to be associated with poverty such as 'lazy', 'feckless', or 'unemployable' (Welshman, 2007). When such terms are used they invoke negative stereotypes linking poverty with deviant and immoral behaviour, thus presenting poverty as shameful and othering the poor (Lister, 2015).

Our focus is on measuring the prevalence of stigmatising and othering rhetoric about the poor. We are not trying to measure the net 'mood' (balance of positive vs. negative coverage) of print media discourse about the poor (Rose and Baumgartner, 2013) because apparently positive words about poverty can be used with a stigmatising intent (consider the negative connotations of the word 'benefits' in contemporary political discourse), and the framing of articles can provoke stigmatising reactions in their readers even if the words they use are generally neutral (see Gilens, 1996 for evidence of how ostensibly neutral images change perceptions of welfare recipients).

We use the frequency (the absolute number of uses) of each word rather than a measure of popularity (the proportion of articles published in a year in which a given word appears), in both descriptive statistics and the regression models. This is because the total number of articles fluctuates substantially from year to year (including a drop at the start of WWII because of paper rationing) and so artificially shifts the relative popularity far more than the absolute frequency.

Table 1 provides descriptive statistics for our set of words. We include sparklines to show differences in how often these words are used over the period. Some words are used fairly consistently, such as 'tramp'. Others are popular only in the early 20th century, such as 'deserving poor', while others gain in popularity such as 'underclass', which was unused prior to the late 20th century.

Word	Average	Min	Max	Sparkline
Peasant*	948.30	467	2413	mont
Tramp*	659.21	195	1216	mand
Beggar*	332.31	46	1313	1mm Mun mon
Peon*	305.90	46	587	www.www.
Pauper*	175.58	10	844	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Dependency	103.70	14	511	m
Idler*	85.61	22	202	mythinghalan
Lower class	72.03	8	181	mannen
Delinquent	62.16	7	272	man
Loafer*	56.02	4	201	Mun man
Delinquency	55.58	2	242	
Indigent	50.02	2	241	Mum
Vagrant	40.94	4	138	Munumunun
Feckless	39.27	0	216	man
Indolent	30.60	5	85	mummunghum
Unemployable	24.62	0	80	Mannan
Vagrancy	23.47	0	93	Mmmunh
Underclass	22.19	0	225	
Deserving poor	22.00	0	153	My my
Shirker*	19.19	1	230	Aman
Scrounger*	16.80	0	130	multiple
Residuum	10.72	0	52	Mr. Whinner and a server a
Skiver*	9.71	0	67	Amomorala
Dependent on benefits	7.86	0	45	MmM
Criminal class	7.30	0	19	MMMMMMMMMM
Workshy	6.64	0	39	MW
Dangerous class	5.20	0	15	Mupple month
Riff raff	1.66	0	20	mmahamm

Table 1: Descriptive statistics for words measuring stigmatising rhetoric about the poor.

Notes: Data from Gale Newsvault. Words ordered by descending average frequency. Sparklines are intended to give a sense of relative frequency of word across time (1896-2000) and should be read with respect to minimum and maximum for each word.





Notes: Both vertical axes are on a logarithmic scale.

In figure 1 we plot the average frequency of stigmatising rhetoric against unemployment rates across the twentieth century, taken from the Bank of England's 'Three Centuries of Macroe-conomic Data' series (Thomas and Dimsdale, 2016). Across much of the 20th century these two lines seem to move together, suggesting that as unemployment rises so does stigmatising rhetoric (r = 0.705), providing some evidence in support of the 'Malthusian' hypothesis.

NEWSPAPER RHETORIC AND UNEMPLOYMENT OVER THE TWEN-TIETH CENTURY

Unemployment rates are a major driver of hardship for which measures are available covering the entire twentieth century (unlike measures of poverty, which are not regularly available until the mid 1960s). Furthermore, the morality and behaviour of the unemployed is central to how poverty has historically been discussed in the British print media, as the cases studies cited above indicate. Therefore, we focus on the relationship between unemployment rates and stigmatising rhetoric to understand how newspaper rhetoric about the poor depends on levels of poverty and hardship.

Looking more closely there are periods when this relationship does not hold. For example,

at the beginning of the 1930s there is a sharp rise in unemployment that coincides with a reduction in the amount of stigmatising rhetoric. Then as unemployment rates gradually fall through the middle of the 1930s stigmatising rhetoric rises again. Similarly, during the 1980s we see this relationship become less clear. As unemployment rates rose between 1979 and 1980, there was a sharp increase in stigmatising rhetoric, but as unemployment continued to increase throughout the middle of the 1980s, stigmatising rhetoric seemed to decline, before rising steadily as unemployment fell.

Box 1: Statistical analysis

Our main model is a first difference model:

$$\Delta Rhetoric_t = \alpha + \beta_1 \Delta Unemployment_t + \beta_2 \Delta Articles_t + \epsilon_t \tag{1}$$

Where t is year and Δ represents annual change. $\Delta Rhetoric$ is the annual change in the logged average number of stigmatising words used by our newspapers in each year, $\Delta Unemployment$ is the change in the logged unemployment rate, $\Delta Articles$ is the change in the logged number of articles published by these newspapers. α is our constant and ϵ is the error term. β_1 is the coefficient of interest and estimates the association between rising unemployment and changes in the amount of stigmatising rhetoric. Models 2 to 4 in table 2 add covariates to this basic specification (see Web Appendix 2 for descriptive statistics). $\Delta Rhetoric, \Delta Articles$, and $\Delta Unemployment$, are all logged because they have highly non-normal distributions.

We also test for non-linearity in the relationship between changes in unemployment and changes in stigmatising rhetoric by including an interaction term between the level of unemployment and changes in the unemployment rate,

$$\Delta Rhetoric_t = \alpha + \beta_1 \Delta Unemployment_t + \beta_2 Unemployment_t + \beta_3 \Delta Unemployment \times Unemployment_t + \beta_4 \Delta Articles_t + \epsilon_t$$
(2)

All models account for autocorrelation using Newey-West standard errors with a second-order lag. We justify this lag-length in web appendix 3.

ARE CHANGES IN UNEMPLOYMENT ASSOCIATED WITH CHANGES IN STIGMA-TISING RHETORIC?

We further investigate the association between unemployment rates and stigmatising rhetoric using regression models (full details in Box 1). As our theory suggests, stigmatising rhetoric should respond to changes in unemployment because journalists and editors are probably more responsive to short-term changes in the economy (eg. 2% rise in unemployment) than long-term structural conditions (eg. low unemployment over the last 10 years). We estimate whether annual changes in unemployment are associated with annual changes in stigmatising rhetoric. This 'first difference' approach reduces the risk of identifying a spurious relationship, espe-

cially if long-run trends in our key variables are correlated with other macroeconomic or political variables. We therefore model the response of the print media to changes in economic conditions rather than the underlying levels, taking into account the total number of articles published in any given year.

	Annual change in the average frequency of					
		stigma	tising words			
	(1)	(2)	(3)	(4)		
Increase in the unemployment	0.058**	0.042*	0.044**	0.033*		
rate (log)	(0.019)	(0.017)	(0.016)	(0.016)		
Increase in the number of	0.77***	0.68***	0.82***	0.77***		
published articles (log)	(0.13)	(0.14)	(0.11)	(0.13)		
Defence spending (%GDP)		-0.0047***		-0.0027		
		(0.00099)		(0.0020)		
Conservative party (ref)						
Labour		-0.023		-0.025		
		(0.020)		(0.021)		
Coalition		-0.014		-0.022		
		(0.022)		(0.029)		
Whig/Liberal		-0.041		-0.046		
		(0.027)		(0.027)		
Increase in public debt			-0.000057	0.00063		
(%GDP)			(0.00062)	(0.00093)		
Increase in tax revenues			-0.0035	-0.0012		
(%GDP)			(0.0050)	(0.0058)		
Increase in non-defence government			0.012***	0.0073		
spending (%GDP)			(0.0030)	(0.0054)		
Constant	-0.0069	0.0062	-0.0083	0.0076		
	(0.0085)	(0.014)	(0.0080)	(0.015)		
Observations	105	105	100	100		

Table 2: Association between unemployment rate and stigmatising rhetoric adjusting for covariates, 1896-2000

Notes: * p < 0.05, ** p < 0.01, *** p < 0.001. Standard errors are in parenthesis. All models estimated using Newey-West standard errors which are adjusted for heteroscedasticity and serial correlation up to the second lag. Descriptive statistics for control variables in Web Appendix 2.

This analysis provides evidence for the 'Malthusian' hypothesis. Rising unemployment is positively correlated with rising stigmatising rhetoric even after accounting for the number of articles published in that year (Model 1: Table 2). Other variables may potentially explain this relationship: in figure 1 unemployment and stigmatising rhetoric both dramatically decline during WWI and WWII and so we include government spending on defence (% of GDP) in our models (Mitchell, 2007), but this does not substantively alter our main finding (Model 2: Table 2). Political factors, such as the party in power, may shape media rhetoric during times of rising unemployment through their 'agenda-setting' capacity (Tyler, 2013). However, we see no clear change in our results once we control for the political party composition of government (Model 2: Table 2). See web appendix 4 for evidence that these results are robust to alternative measures of wartime, and controls for election year.

The health of public finances is another possible confounder: during the Great Recession conservative media often blamed welfare recipients for high levels of public sector debt. Therefore we add measures of public debt, tax revenue, and non-defence public spending, all as a proportion of GDP, to our models (Thomas and Dimsdale, 2016). The coefficient on unemployment remains positive and statistically significant, although there is some evidence that increased non-defence public spending is associated with increased stigmatising rhetoric. Taken together, the stability of our regression results offer further evidence in favour of the 'Malthusian' hypothesis that stigmatising rhetoric becomes more common when unemployment rises.

Why does the relationship between unemployment and stigmatising rhetoric weaken in the 1930s and 1980s?

Figure 1 shows that the association between unemployment and negative rhetoric breaks down in periods of especially high unemployment rates, potentially suggesting some non-linearity in the association between unemployment and stigmatising rhetoric. Stigmatising rhetoric may not increase with rising unemployment if the starting level of unemployment is already very high.

To test this we re-estimate model 1 from table 2 with an interaction between the change in the unemployment rate and the level of unemployment (see Box 1, web appendix 5 for details). Figure 2 plots the estimated effect of a 1% increase in unemployment on changes in negative rhetoric, at a variety of different starting levels of unemployment. A 1% increase in unemployment is associated with a greater increase in stigmatising rhetoric when the initial level of unemployment is low. At higher rates of unemployment the effect of an increase in unemployment on stigmatising rhetoric gets smaller. At levels of unemployment above 7% the association between change in unemployment and stigmatising rhetoric is not significantly different from 0. In fact, at very high levels of unemployment, an additional increase in unemployment – for example, from 13% to 14% - may even reduce the amount of stigmatising rhetoric (although the confidence intervals cover 0). This is the situation we see in the early 1930s when the use of stigmatising rhetoric falls once unemployment rates became exceptionally high.

Figure 2: Increases in unemployment are associated with increases in stigmatising rhetoric only when the level of unemployment is low



Notes: We estimate the change in stigmatising rhetoric associated with a 1% increase in unemployment given the pre-existing level of unemployment. While an unemployment of 0 is strictly outside of our sample, there are years when unemployment rates are very low (0.1%). Model coefficients in web appendix 5.

IS RISING UNEMPLOYMENT ASSOCIATED WITH CHANGES IN WORDS UNRE-LATED TO POVERTY?

It is possible that the association between unemployment and stigmatising rhetoric could be spurious and driven by some unobserved factor that affects the words newspapers use unrelated to changes in unemployment rates. We explore this possibility by testing whether our measure of unemployment is correlated with a set of placebo words that we would not theoretically expect to be correlated with changes in unemployment. Using the same data and method described above (see Box 1), we construct a sample of 12 commonly-used words in four categories: historical figures (Shakespeare, Mozart), past-times (football, cricket, opera, theatre), countries (France, Germany, America), and rooms of the house (bedroom, bathroom, kitchen). We hypothesise that changes in the logged frequency of these 'placebo' words should not be associated with changes in logged unemployment rates. If they were, this would raise serious doubts about our argument. Table 3 replicates models from Table 2 with logged mean frequency of placebo words as the dependent variable. In each model the relationship is positive but statistically insignificant. Moreover, the size of the association is far smaller. For example, in the fully adjusted models (models 4 in tables 2 and 3), the coefficient for stigmatising rhetoric (δ stigmatising = 0.033) is 10 times larger than the coefficient for the placebo words (δ placebo = 0.0031). These models increase our confidence that the relationship between unemployment and stigmatising rhetoric is not spurious.

	Annual change in the average frequency of						
		placeb	oo words				
	(1)	(2)	(3)	(4)			
Increase in the unemployment	0.025	0.020	0.013	0.0031			
rate (log)	(0.017)	(0.014)	(0.013)	(0.011)			
Increase in the number of	0.71***	0.67***	0.81***	0.75***			
published articles (log)	(0.13)	(0.13)	(0.10)	(0.11)			
Defence spending (%GDP)		-0.0018		-0.0027			
		(0.0012)		(0.0018)			
		. ,		. ,			
Conservative party (ref)							
Labour		0.020		0.022			
Labour		-0.020		-0.022			
		(0.013)		(0.013)			
Coalition		-0.013		-0.022			
		(0.017)		(0.019)			
Whig/Liberal		-0.0088		-0.016			
		(0.016)		(0.017)			
Increase in public debt (%CDD)			0.000.28	0.00006			
merease in public debt (%GDF)			(0.00028)	(0.00090)			
			(0.00042)	(0.00061)			
Increase in tax revenues (%GDP)			-0.0016	0.00076			
			(0.0027)	(0.0029)			
Increase in non-defence government			0.0012	-0.0028			
spending (%GDP)			(0.0020)	(0.0030)			
Constant	0.0020	0.012	0.0022	0.01/			
Constant	0.0030	0.012	(0.0032)	0.016			
	(0.0065)	(0.0090)	(0.0057)	(0.0083)			
Observations	105	105	100	100			

Table 3: Association between unemployment rate and placebo words adjusting forcovariates, 1896-2000

Notes: * p < 0.05, ** p < 0.01, *** p < 0.001.. Standard errors are in parenthesis. All models estimated using Newey-West standard errors which are adjusted for heteroscedasticity and serial correlation up to the second lag. Descriptive statistics for control variables in Web Appendix 2.

ARE OUR RESULTS ROBUST TO MEASUREMENT ERROR?

Measuring stigmatising rhetoric about the poor by counting the number of times particular words or phrases are used will necessarily entail measurement error. In this section we explore whether and how measurement error may bias our results.

We first investigate whether a few specific words are driving our results by estimating regression models where the frequency of each individual word is treated as a separate response variable. Figure 3 presents the association between logged unemployment rates and each of the 28 words we use to measure stigmatising rhetoric (see table 1).⁶ Of the thirty-two words analysed, thirty (94%) have positive associations with unemployment – meaning they are used more often in years when unemployment is higher. Moreover, the confidence intervals around the coefficient for logged unemployment do not include zero for twenty-eight of the thirty-two words (88%). The vast majority of the stigmatising words in our sample are used with higher frequencies in years with higher levels of unemployment, providing evidence their usage is driven by a common underlying process.

Frequency of word use is an imperfect measure of stigmatising rhetoric because all of the words used in this analysis are polysemic, even if they are primarily recognisable as words associated with poverty. Ambiguity of meaning creates some uncertainty in our results: perhaps the correlations we observe are driven by uses of words that are unrelated to poverty. To address this concern, we conduct a content analysis of newspaper articles in years where our regression model fits well (i.e. typical cases) and years where our model fits poorly (i.e. deviant cases). Typical case analysis is primarily confirmatory – exploring whether the words and phrases used in our measure of stigmatising rhetoric are in fact being deployed in a poverty-related context. Deviant case analysis, however, is particularly good at discovering measurement error or omitted variables (Seawright, 2016).

We identify two typical (1901 and 1991) and two deviant (1934 and 1980) cases using the absolute value of the residuals from model 1 in table 2 and we selected words for further analysis based on whether they were rising in that year or were unusually elevated in that period. We also chose a variety of words to ensure our results are not driven by idiosyncrasies of any particular term. In each year, we read the first 100 randomly selected articles or, if there were fewer than 100 articles, we read every article. The second author then coded each usage of each word according to whether the word was used in reference to the poor (if it was not it was classed as 'irrelevant') and if the word was used in reference to the poor we then determined whether the word was used in a stigmatising, sympathetic, or neutral way. The first author also coded half of these cases to check intercoder reliability. We provide some illustrative examples of this coding in table 4. Further details are provided in Web Appendix 6, including statistics on intercoder reliability.

⁶Negative binomial models for overdispersed count data are used, with the total number of articles treated as an exposure variable. Serial correlation is corrected for with Newey-West standard errors, and a linear time trend included. Note that this analysis examines levels of unemployment and frequency of word usage rather than changes.

Figure 3: Association between unemployment and the frequency of stigmatising words or phrases, 1896-2000



Notes: Each point estimate and 95% confidence interval comes from a different regression model. All models are negative binomial regression models which adjusts for over-dispersion using the total number of articles published in a given year. We use Newey-West standard errors to adjust for serial correlation and heteroscedasticity.

Tuble 1. Englished of newsbuber word usuee by relevance and seminitin	Table 4: Exam	ples of newspaper word	usage by re	levance and	sentiment
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Stigmatising/Negative	Sympathetic/Positive	Neutral	Irrelevant
'A family of paupers, extending to three generations, has cost the ratepayers of the Paddington Union a sum of £3,000' (Hereditary Pauperism, Daily Mail, 21/11/1901)	'A pathetic letter, which throws a flood of light on the terrible monotony of life in a workhouse' (A day in a Pauper's Life, Daily Mail, 29/10/ 1901)	'Mr How is highly educated, and spends most of his time travelling about the country, mixing with tramps and other outcasts' (A Pauper Millionaire, Daily Mail, 9/10/1901)	'The man found dead under a hedge and since buried in a pauper's grave, was John Howard Bullheid' (Solicitor's Strange Death, Daily Telegraph, 9/10/ 1901)

'Gangs of drunken beggars aggressive vagrants' (Menace of the beggars who strike fear in heart of London, Daily Mail, 17/6/1991)	'An underclass is formed by a physical concentration of social problems' (The Underclass is no Illusion, Financial Times, 22/4/1991)	'His chosen descent into the underworld of the workless and vagrant' (Making it seem virtuous to eat bacon, Daily Telegraph, 19/10/1991)	'Jimmy finds a vagrant who has moved in' (TV Listing for Casualty, 8/11/1991)
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The typical case analysis confirms our main findings, but it also highlights some of the challenges with this approach to measuring stigmatising rhetoric. Both 'pauper' and 'underclass' were almost always used in relation to issues of poverty but this was not always true of 'loafer' and 'vagrant', where around 40% of mentions were not directly related to poverty. Importantly, of the uses of 'loafer' and 'vagrant' that pertain to poverty, the majority are negative (40%-50%, compared to 0%-18% that are sympathetic). This suggests that increases in stigmatising words are a good measure of increasing stigmatising rhetoric, and do not simply capture increasing discussion of poverty in general at times of high unemployment.

The deviant case analysis brings out a different but equally important perspective. In those years where our model fits poorly there are a higher number (30%-70% of all uses) of 'irrelevant' uses of tramp (e.g., 'tramp shipping'), beggar (e.g., 'The Beggar's Opera'), and workshy (e.g., the name of a race-horse). These cases fit our model poorly because the words are not being used to describe the poor at all, confirming the presence of measurement error in our dependent variable (Seawright, 2016).

Our content analysis of typical and deviant cases provides additional evidence supporting the 'Malthusian' hypothesis that stigmatising rhetoric increases when unemployment rises. Counting word frequencies is not a perfect strategy for measuring negative rhetoric. It clearly captures both signal (uses of the words in relation to poverty) and noise. The noise that we measure, however, seems more likely to be random (uses of the words unrelated to poverty) rather than biasing our results.

DISCUSSION

This analysis draws on a dataset measuring how often five centrist and right-wing newspapers used stigmatising language about people in poverty across the twentieth century. Case studies of media rhetoric have often argued that the poor are stigmatised more by the media during recessions because the media frame unemployment through a Malthusian lens (Harkins and Lugo-Ocando, 2016). Consistent with this argument, we find that when unemployment increases so too does the frequency of stigmatising rhetoric about the poor. This association is not explained by other political, economic, or fiscal variables. Our content analysis of articles suggest that the words we selected are used in a predominantly stigmatising or negative way in years where unemployment is increasing.



Figure 4: Trends in the frequency of stigmatising rhetoric and welfare attitudes in the UK

Notes: Public opinion data from the British Social Attitudes Survey 1987-2000.

STIGMA AND ATTITUDES TOWARD PEOPLE ON BENEFITS

One possible consequence of the recurrent stigmatisation of the poor is its effect on public attitudes toward people in poverty and welfare recipients. Media framings have a great deal of power to 'construct' and 'normalise' certain ways of viewing poverty (Gamson et al., 1992). Unfortunately, data on public opinion toward welfare is too sparse before the 1980s to systematically investigate whether shifts in media rhetoric influenced attitudes (Hudson et al., 2016). Looking just at attitudinal shifts towards welfare recipients since the start of the British Social Attitudes Survey (covering 1987-2000), we find increasing stigmatising rhetoric about welfare recipients in the media during the late-1980s and 1990s appears to have preceded increasingly negative social attitudes (figure 4). This trend is consistent with a wide body of empirical evidence documenting the effect of the media on attitudes (King et al., 2017) and political outcomes, like voting (Reeves et al., 2016).

CAUSALITY, MECHANISMS, AND MEDIA PRODUCTION

The temporal reach of our analysis allows us to avoid relying on case studies of specific periods when media stigmatisation of the poor was highly salient. Our modelling attempts to address both long-term confounding through first differencing, and short-term confounding through

our control variables- a strategy which is reinforced by our placebo analyses. However, we are still cautious about a causal interpretation of our results, in part because of the usual difficulties involved in causal inference from observational data, but also because the account we provide does not fully specify or test the mechanisms involved in producing articles about people in poverty. The content and tone of newspaper articles are determined by a complex set of interactions among journalists, editors, newspaper proprietors, and the perceived or actual response of readers; these are processes our results do not address (Gamson et al., 1992; Golding and Middleton, 1982; Herman and Chomsky, 1994).

An additional reason for caution is that our theory does not fully account for those periods when the relationship between unemployment and stigmatising rhetoric weakens. When unemployment is already very high (e.g., 1930s and 1980s) then further increases in joblessness do not necessarily lead to more stigmatising language. One possible explanation is that structural understandings of poverty may become more plausible in periods when unemployment is exceptionally high and it becomes difficult to blame the moral failings of the unemployed. It is also possible the economic situation of journalists might affect the content of their articles. If journalists become at particular risk of losing their jobs during extremely deep recessions they might become more sympathetic towards the poor.

Given these caveats, we argue future research should trace how processes of media production affect the way people in poverty are presented. This work could deploy detailed discourse analysis or archival research to unpick how actors such as proprietors or editors shape journalistic decisions about how to cover stories about poverty, and how they respond to changing economic conditions (Baker, 2007).

HISTORY, CONTEXT, AND IDEATIONAL EMBEDDEDNESS

One insight we gain from our historical approach is the degree to which Malthusian explanations of poverty have become 'ideationally embedded' in British politics and culture (Somers and Block, 2005). The very fact that we observe a relatively stable association between rising unemployment and the frequency of stigmatising rhetoric is indicative of how particular ideational regimes are redeployed to 'construct, ... explain, and normalise market processes', particularly in moments of 'crisis' when the logic of Malthusianism might be dislodged by some other 'more compelling public narrative' (Somers and Block, 2005: 264, 271). For example, the experience of personal or family unemployment may lead individuals to support greater redistribution if they are not countered by a narrative that blames the crisis on the immoral behaviour of the poor. The ideational embeddedness of Malthusian ideas may help us explain why people living in poverty are to deploy stigmatising language themselves: their interpretation of the social world is framed by, and draws on, the same set of narratives, symbols, and discourses.

Our paper has broader theoretical relevance beyond poverty stigma because it provides an account of the conditions under which deeply embedded cultural understandings are differentially activated when they resonate with the structural context. This theoretical apparatus, when combined with our long historical focus might prove useful for understanding the resur-

gence of anti-immigrant sentiment and nationalism in the press, and how these trends may reflect longer processes connected with imperialism, decolonisation, and mass immigration to the UK (Bonikowski, 2017).

LIMITATIONS

Error in our measure of stigmatising rhetoric is a limitation of our analysis. There will be occasions when we count the usage of a word as 'stigmatising' even though it is being used in another context; this issue is exacerbated by the way that the language used to talk about poverty changes over time. However, our content analysis suggested that measurement error predominantly occurred in years where model fit was poor, implying that error in our measure of stigmatising language likely undermines our ability to observe a relationship between economic conditions and stigmatising rhetoric. Another concern is the generalisability of our results, which are limited because the archive used in our analysis only provides access to a set of centrist and right-wing publications. We cannot draw any conclusions about how left-wing papers respond to rising unemployment. We are also unable to address the extent to which journalists are responding to the attitudes of their readers. While we cannot rule out this possibility entirely, it is unlikely during the first three quarters of the twentieth century because newspapers did not have access to regular and consistent polling data on the attitudes of their readers towards welfare recipients (Hudson et al., 2016). This may change in the future as such data has now become far more readily available.

CONCLUSION

The rise in stigmatising media rhetoric about the poor following the Great Recession was consistent with a pattern we observe across the twentieth century: as unemployment increases so does newspaper stigmatisation of the poor. Although our data ends during the earliest years of New Labour, there is little reason to expect that much has changed since then. The Blair government presented itself as no soft touch on welfare, a trend that was only amplified by the Conservative-led coalition. The Cameron government attacked 'scroungers' and 'skivers', language that was also picked up by newspapers (Jensen and Tyler, 2015). The phenomenon of 'poverty porn' too is symptomatic of the ideational embeddedness of Malthusian ideas, revealing how producers, viewers, and, to some extent, subjects of these 'documentaries' draw on and reproduce these narratives (Jensen, 2014). These ideas are deeply rooted in the British cultural imagination and so such language will return in the future, likely in a different form, but with the same purpose of 'holding dependent poverty disgraceful' (Malthus, 2008: III.VI.5). Though the specific words used might vary, the rhetoric of recessions among centre-right British newspapers is unlikely to change in the near future. Acknowledgments We would like to thank Imogen Tyler, Jonathan Mijs, Robert de Vries, and the members of the LSE's writing group in the Sociology Department for helpful comments on earlier versions of this paper. We would also like to acknowledge the reviewers and editor at Sociology, whose comments have helped us to improve the paper.

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Web Appendix

Web Appendix 1: Circulation figures, political leaning, readership demographics, and ownership details of selected newspapers

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WEB APPENDIX 1: CIRCULATION FIGURES, POLITICAL LEANING, READERSHIP DEMOGRAPHICS, AND OWNERSHIP DETAILS OF SELECTED NEWSPAPERS

This appendix provides additional detail about our sample of newspapers. Most of the data presented here is not available for the Economist as it is usually classed as a weekly news magazine rather than a newspaper (though it self-describes as a newspaper). In terms of readership demographics and political leanings it is likely to be similar to the Financial Times.

Political leanings

Our sample of papers are predominantly centrist or right-wing in orientation. The Daily Mail and Daily Telegraph have both been staunchly conservative since their founding (Temple, 2008: 34–9), and have backed the British Conservative Party at every election from 1945 onwards (Butler and Butler, 2000: 536). The Times also usually endorses the Conservative Party, while the Economist and Financial Times tend more towards classical liberal concerns about free trade and markets.

Circulation

Table 1a displays circulation information for the daily (rather than Sunday) editions of the Mail, Telegraph, Times, and Financial Times. In terms of circulation, the Daily Mail and Telegraph reach a mass market, with circulations of over 1 million a day for much of the 20th century, as table 1a illustrates. The Times and Financial Times perhaps make up for their smaller circulations by their reputation for reaching and influencing political and economic elites. Excluding the Economist, our sample of papers consistently reach about 3-4 million readers in the post-war period, which comprises about a quarter of the total circulation of national daily newspapers, and between one quarter and half of all papers published consistently across the 20th century.

		Circulatio	on in 000s				
Year	Daily Mail	Daily Telegraph	Times	Financial Times	Total	% of total circulation	% circulation of consistently published
1910	900	230	45		1175	27%	52%
1930	1986	222	187		2395	27%	41%
1939	1510	640	213		2363	22%	29%
1951	2245	976	254	57	3532	21%	24%
1960	2084	1155	255	122	3616	22%	26%
1965	2464	1351	258	146	4219	27%	29%
1970	1917	1402	402	170	3891	33%	35%
1980	1985	1456	316	196	3953	26%	28%
1990	1708	1076	420	290	3494	25%	28%
1998	2343	1062	760		4165	33%	35%

Table 1a: circulation for our sample of newspapers

Notes: all circulation figures in 000s. Figures originate from a variety of sources collected in Butler and Butler (2000: 536–8) except Financial Times (Seymour-Ure, 2000: 28–9). No data is available for the Financial Times prior to 1951 because it was not regarded as a national newspaper due to its' narrow focus on finance.

Readership Demographics

Newspaper readership is closely associated with occupational status (Chan and Goldthorpe, 2007). The Telegraph, Financial Times, and Times, all belong to the so-called 'broadsheet' or 'quality' press aimed at high status professional and managerial classes, while the Daily Mail is usually seen as a 'mid-market tabloid' appealing to a lower-middle class/ intermediate status audience. Table 1b confirms these conclusions, for the post-war era at least – 40-50% of the readership of the Telegraph, Financial Times, and Times come from the professional and managerial classes, and fewer than 10% (except for the Times in 1966) from the semi and unskilled manual classes. By contrast, the Daily Mail draws a similar proportion of readers from these two classes. Thus our sample of newspapers is read generally by relatively advantaged groups, with the exception of the Mail, which has always tended to have a broader appeal (Temple, 2008: 28–9).

1966			1993-4			
AB	DE	difference	AB	DE	difference	
19	27	-8	30	16	14	
42	8	34	55	7	48	
56	3	53	61	4	57	
54	15	39	60	7	53	
	AB 19 42 56 54	19 AB DE 19 27 42 8 56 3 54 15	1966 AB DE difference 19 27 -8 42 8 34 56 3 53 54 15 39	1966 AB DE difference AB 19 27 -8 30 42 8 34 55 56 3 53 61 54 15 39 60	1966 199 AB DE difference AB DE 19 27 -8 30 16 42 8 34 55 7 56 3 53 61 4 54 15 39 60 7	

Table 1b: Percentage of newspaper readership in NRS Social Grade AB – professional, administrative, and managerial, DE – semi and unskilled manual.

Notes: data from the National Readership Survey, tabulated in Seymour-Ure (2000: 144–5)

Ownership

Media theorists often regard newspaper proprietors as having a major influence on the output and tone of newspapers. The Daily Mail, Daily Telegraph, and Times (including Sunday editions) are owned by privately owned companies on behalf of wealthy proprietors 'press barons' (for example Rupert Murdoch's News International have owned the Times since 1981). This ownership model has persisted since the founding of all three papers, with fairly few changes of ownership, the Daily Mail in particular is still owned by descendants of Viscount Rothermere, one of the paper's founders in 1896. In all of these cases proprietors are likely to have had substantial effects on content (see Temple, 2008: 34–9 for the case of the Daily Mail). By contrast, the Financial Times was owned by Pearson, a publicly listed media and publishing company from 1957 to 2015 (Butler and Butler, 2000; Seymour-Ure, 2000). The Economist has been owned since its' founding by the Economist Newspaper Limited, with 50% of its' shares owned by Financial News Ltd since 1928.

Variable	Mean	Std. Dev.	Min	Max	Ν
Logged negative rhetoric	4.67	.386	3.57	5.43	105
Logged unemployment rate	1.11	1.07	-2.23	2.73	105
Logged number of articles	12.5	.390	11.7	13.3	105
Logged placebo words	8.56	.419	7.72	9.46	105
Defence spending as % of GDP	8.98	12.0	2.43	52.0	105
Public debt	93.1	61.3	25.2	237.9	105
Tax revenue as % of GDP	29.3	10.4	10.0	43.5	101
Government non-defence spending as % of GDP	26.1	9.70	9.51	42.8	105
Political party in government					
Conservative	.485	.502	0	1	105
Labour	.219	.416	0	1	105
Coalition	.200	.402	0	1	105
Liberal	.095	.295	0	1	105

Web Appendix 2: Descriptive statistics for dependent, independent, and control variables

Notes: Logged negative rhetoric and logged numbers of articles use data from Gale Newsvault (authors' calculations). Public debt, tax revenue as a proportion of GDP, government spending as % proportion of GDP from (Thomas and Dimsdale, 2016). Means of categorical variables can be interpreted as proportion of total cases falling into specific category.

Web Appendix 3: Addressing autocorrelation

Table 3a compares an OLS regression model to three models which adjust for autocorrelation in slightly different ways. Model 1 is estimated using OLS. The residuals from this model are negatively autocorrelated with two lags. Model 2 is a Prais-Winsten regression model, which assumes that the autocorrelation follows an AR(1) process. Model 3 is an OLS model with Newey-West standard errors adjusted for serial correlation up to a second lag. Model 4 directly models the autocorrelation process by including 2 lags of the dependent variable, logged change in unemployment, and logged change in the number of articles as predictors. This model was selected by examining a number of autoregressive models with different lag lengths, finding that an AR(2) model minimises the Bayesian Information Criterion (a commonly used tool for selecting lag length- see table 3b below). This model has residuals that exhibit no significant autocorrelation.

Comparing all four models it can be seen that the standard error of the estimate of logged change in unemployment on logged change in negative rhetoric is very similar across all four models (from 0.019 in the Newey model to 0.023 in the OLS model), and statistically significant. Thus, our central result appears to be robust to a variety of different strategies for adjusting for autocorrelation. The majority of models presented in the main article adjust for autocorrelation using Newey-West standard errors adjusted for autocorrelation up to a lag of two and heteroscedasticity.

	Annual change in the average frequency							
	of negative words							
	(1) (2) (3)							
Method	OLS	Prais	Newey	AR(2)				
Increase in the unemployment	0.058*	0.063**	0.058**	0.065**				
rate (log)	(0.023)	(0.021)	(0.019)	(0.021)				
Increase in the total number of	0.77***	0.83***	0.77***	0.85***				
published articles (log)	(0.11)	(0.10)	(0.13)	(0.091)				
Constant	-0.0069	-0.0072	-0.0069	-0.0074				
	(0.011)	(0.0086)	(0.0085)	(0.0074)				
AR(1)				-0.33**				
				(0.097)				
AR(2)				-0.23*				
				(0.091)				
Observations	105	105	105	105				

Table 3a: Robustness of association between unemployment and negative rhetoric to adjustment for autocorrelation.

Notes: Standard errors in parentheses. * p < 0.05, ** p < 0.01, *** p < 0.001. Prais-Winsten regression models assume that the autocorrelation follows an AR(1) process. Newey model contains standard errors that are adjusted for serial correlation up to the second lag and heteroscedasticity. Autoregressive model contains two lags of the dependent variable, and two lags of both independent variables.

Lag length	Bayesian Information Criterion
0	-145.8
1	-148.4
2	-149.1
3	-146.9
4	-142.3
5	-139.8
6	-135.7

Table 3b: Bayesian Information Criterion from ARIMA models with various lag lengths

Web Appendix 4: Robustness of relationship between unemployment and negative rhetoric to alternate controls for war and defence spending and general elections

Table 4a displays regression models with alternative controls for wartime. Model 1 uses defence spending as a percentage of GDP as a proxy for war-time. Model 2 codes the first and second world wars separately and model 3 includes additional wars – the Boer War, Falklands War, and the first Gulf War. Our estimate of the association between changes in logged unemployment and logged negative rhetoric is very similar in magnitude to model 1 in table 2 in the main text, and remains statistically significant.

	Annual change in the average frequency				
	0	f negative words	5		
	(1)	(2)	(3)		
Increase in the unemployment rate (log)	0.042*	0.054**	0.056**		
	(0.017)	(0.019)	(0.019)		
Increase in defence spending as a	-0.0046***				
% of GDP	(0.0010)				
Increase in the total number of	0.70***	0.72***	0.74***		
published articles (log)	(0.13)	(0.14)	(0.13)		
No war (ref)					
WW1		-0.024			
		(0.039)			
WW2		-0.036			
		(0.039)			
No war (ref)					
Any war			-0.022		
			(0.029)		
Constant	-0.0057	-0.0027	-0.0017		
	(0.0085)	(0.0095)	(0.0100)		
Observations	105	105	105		

Table 4a: regression models with controls for defence spending and alternative specifications of war-time.

Notes: Standard errors in parentheses. * p < 0.05, ** p < 0.01, *** p < 0.001. All models estimated using Newey-West standard errors which are adjusted for serial correlation up to the second lag and heteroscedasticity. Data on defence spending as a percentage of GDP from Mitchell (2007).

Table 4b displays models with additional controls for the years in which general elections were held. Model 1 is a base model and includes just unemployment rates and the number of articles published in a given year. Model 2 adds elections as a dummy and then model 3 adds elections as a change variable, capturing whether moving into an election year is correlated with stigmatizing rhetoric. In both cases, there is no clear association.

	Annual change in the average frequency		
	of negative words		
	(1)	(2)	(3)
Increase in the unemployment rate (log)	0.058**	0.058**	0.058**
	(0.019)	(0.020)	(0.020)
Increase in the total number of	0.77***	0.75***	0.76***
published articles (log)	(0.13)	(0.13)	(0.13)
Election year (=1)		-0.033	
		(0.026)	
Change in elections			-0.0033
			(0.016)
Constant	-0.0069	0.00077	-0.0069
	(0.0085)	(0.011)	(0.0086)
Observations	105	105	105

Table 4b: Regression models with controls for election years.

Notes: Standard errors in parentheses. * p < 0.05, ** p < 0.01, *** p < 0.001. All models estimated using Newey-West standard errors which are adjusted for serial correlation up to the second lag and heteroscedasticity.

Web Appendix 5: How the relationship between changes in unemployment and changes in stigmatising rhetoric depend on starting levels of unemployment

Table 5a below shows the regression model on which figure 2 in the main text was based. It Builds on model 1 in table 2 by introducing an interaction between changes in the unemployment rate and starting levels of unemployment.

	Annual change in the average
	frequency of negative words
	(1)
Increase in the unemployment rate (log)	0.083**
	(0.025)
Unemployment rate	-0.0012
	(0.0024)
Increase in the unemployment rate (log) $ imes$	-0.0069*
Unemployment rate	(0.0034)
Increase in the number of published articles (log)	0.75***
	(0.13)
Constant	0.0012
	(0.013)
Observations	105

Table 5a: How the relationship between changes in unemployment and changes in stigmatising rhetoric depend on starting levels of unemployment

Notes: Standard errors in parentheses. * p < 0.05, ** p < 0.01, *** p < 0.001. All models estimated using Newey-West standard errors which are adjusted for heteroscedasticity and serial correlation up to the second lag. Descriptive statistics for all control variables are given in Web Appendix 2.

WEB APPENDIX 6: TYPICAL AND DEVIANT CASE SELECTION

In this web appendix we provide more details regarding the different components of the typical and deviant case analysis. This analysis is based on the procedure developed by Seawright (2016).

Step 1: Selecting typical and deviant cases

We selected 1901 and 1991 as our typical cases - these are years where there was a low residual (the model fit well) and a rise in unemployment (see table 6a). In 1901 we selected the words Pauper* (11% rise) and Loafer* (14% rise) while in 1991 we selected the words underclass (a decline in this year but from very high levels unique to the 1990s) and vagrant* (11% rise). We selected 1934 and 1980 as our deviant cases - these are years where there was a high residual (the model fit poorly). In particular, we look at years where negative rhetoric appears to have risen. In 1934 we selected Tramp* (33% rise) and unemployable (43% rise) while in 1980 we selected beggar* (49% rise) and workshy (a small decline in this year but to its 4th highest value concentrated in the 1980s).

Table 6a: Identifying typical and deviant cases				
Year	Percentage-point change in unemployment rate	Residual	Words selected	
Typical				
1901	0.76	-0.05	Pauper* and Loafer*	
1991	2.1	-0.03	Vagrant* and Underclass	
Deviant				
1934	-2.21	0.25	Unemployable and Tramp	
1980	1	0.26	Beggar* and Workshy	

Step 2: Coding the articles

In each year, we read the first 100 randomly selected or, if there were fewer than 100 articles, we read every article. We used a 4 category coding scheme which had been developed by both authors. This tried to identify – as the results indicate – irrelevant uses of the key words. When the words were used in the context of poverty, the articles were coded according to whether the article deployed this term in the context of the stigmatising assumptions that are often associated with these pejorative descriptions of the poor.

Step 3: Checking intercoder reliability

After the main coding was completed, another author also coded 2 key words from two different years ('underclass' in 1991 and 'tramp' in 1934). The degree of intercoder agreement was relatively high for 'underclass' (Kappa statistic = 0.567, z-score = 5.81) and very high for 'tramp' (Kappa statistic = 0.800, z-score = 8.20). While the coding was not perfectly matched, there is a high degree of agreement between the two coders.

Stigmatising/Negative	Sympathetic/Positive	Neutral	Irrelevant
'A family of paupers, extending to three generations, has cost the ratepayers of the Paddington Union a sum of £3,000' (Hereditary Pauperism, Daily Mail, November 21, 1901)	'A pathetic letter, which throws a flood of light on the terrible monotony of life in a workhouse' (A day in a Pauper's Life, Daily Mail, October 29, 1901)	'Mr How is highly educated, and spends most of his time travelling about the country, mixing with tramps and other outcasts' (A Pauper Millionaire, Daily Mail, October 9, 1901)	'The man found dead under a hedge and since buried in a pauper's grave, was John Howard Bullheid' (Solicitor's Strange Death, Daily Telegraph, October 9, 1901)
'Verminous tramps and loafers' (Tramp Plague in London, November 8, 1901, Daily Telegraph)	'People sleeping rough in indescribable squalor' (More aid to vagrants as MPs voice worries, The Times, February 9, 1991)	'An admiring crowd of loafers' (A derby disappointment, Daily Telegraph, June 6, 1901)	'Author of "The Chronic Loafer"' (A drone and a dreamer, The Times, December 19, 1901)
'Gangs of drunken beggars aggressive vagrants' (Menace of the beggars who strike fear in heart of London, Daily Mail, June 17, 1991)	'An underclass is formed by a physical concentration of social problems' (The Underclass is no Illusion, Financial Times, April 22, 1991)	'His chosen descent into the underworld of the workless and vagrant' (Making it seem virtuous to eat bacon, Daily Telegraph, October 19, 1991)	'Jimmy finds a vagrant who has moved in' (TV Listing for Casualty, November 8, 1991)
'A deeper revolt by an underclass of teenagers seemingly no longer able to communicate with society' (Cooling the Hotheads, Sunday Telegraphy, September 8, 1991)	'Described the men for whom the appeal was made as unemployable on the general labour market' (Helping hand for ex-servicemen, Daily Telegraph, October 13, 1934)	'There is no common culture of the underclass' (The stuff of a thousand suburban novels, Daily Telegraphy, February 15, 1991)	'Japan Airlines is scrapping an in-flight magazine which referred to a social underclass' (Touchy Subject, Daily Telegraph, November 8, 1991)
""Tramps" are an enemy of society' (Crime in Scotland, The Times, May 2, 1934)	'Evangelism is like one beggar telling another where to find bread' (Theologians united on Christian message, The Times, July 28, 1980)	'We have never suggested that all the 2m jobless were workshy' (Plight of the unemployed, Financial Times, September 12, 1980)	'One of the troubles of the tramp steamer' (Liners' Bid for Freights 'Filching from Tramps', Daily Telegraph, December 1, 1934)

Table 6b: Examples of usage coded in each category

"The recession has already been driving endemic crime, prostitution, and beggary" (The tinderbox, The Economist, May 17, 1980)	'It reflected a collection of Tory myths about social security, the workshy, and the unemployed' (Unemployed 'Being Made Scapegoats for Economic Ills', Daily Telegraph, April 1, 1980)	'When beggars die, there are no comets seen' (Let them die with dignity, The Times, April 29, 1980)	ʻBeggar's Bridge' (Racing, Daily Mail, July 4, 1980)
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We have also reproduced 3 articles used in this analysis below.

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Typical case (High unemployment – high negative rhetoric)						
Year	Word	Negative	Sympathetic	Neutral	Irrelevant	Total
1901	Pauper*	74	24	29	3	130
	%	56.9	18.5	22.3	2.3	100
1901	Loafer*	45	0	5	34	84
	%	53.6	0.0	6.0	40.5	100
1991	Vagrant*	45	5	7	42	99
	%	45.5	5.1	7.1	42.4	100
1991	Underclass	52	18	15	14	99
	%	52.5	18.2	15.2	14.1	100
Deviant case (high negative rhetoric – low change in unemployment)						
1934	Unemployable	10	5	6	9	30
	%	33.3	16.7	20.0	30.0	100
1934	Tramp	17	1	14	67	99
	%	17.2	1.0	14.1	67.7	100
1980	Beggar*	17	1	7	74	99
	%	17.2	1.0	7.1	74.7	100
1980	Workshy	5	3	8	14	30
	%	16.7	10.0	26.7	46.7	100

Notes: Workshy spikes because it was the name of a horse. Unemployable is used to refer to blindness quite a bit and there was some concern about charity for these groups. Tramp is highly irrelevant because there was a shipping crisis and one of the types of ships involved was called a 'tramp'. Beggar* is highly irrelevant because there was theatrical production titled 'The Beggar's Opera' and Lester Piggott rode a horse called Beggars Bush. These both received a lot of coverage.

'King of the Beggars' knocked off throne



Why I had to be with Ivan, by pregnant Mrs Lendl

IVAN LENDL'S pregnant wife has defied doctors to join him for Wimbledon, she said yesterday.

Samantha Lendi, expecting twins in August, insisted that she 'could not bear to be away' from the tennis star for more than a month.

month. Doctors had encouraged her to remain at home in Connecticut as her husband went in search of the one great prize which has eluded him.

They were angry at first, they did not want me to travel at all, she said yesterday at their rented house overlooking Wimbledon Common.

Whatever the risk might be, and I don't think I'm taking any risk. I'm happier with I'van par-ticularly at this important time. That makes good medical sense and I think that is what per-suaded the doctors.

The couple are paying £18,000 for their house and are among



STAR'S WIFE DEFIES DOCTORS

By DAVID WILLIAMS, Chief Reporter

A MAN nicknamed 'King of the Beggars' rammed a broken bottle into the face of a City broker who refused him money, the Old Bailey heard yesterday.

Drunken Edmund Williams punched and kicked rugby player Michael Heraghty, 27, as he fell to the ground, blood pouring from his face, in the heart of the West End.

The attack scarred him for life as the glass ripped through his cheek - nar-rowly missing an eye -and into his mouth.

Last night, after Williams, also 27, was jailed for four years, police spoke of the grow-ing menace of violence on the capital's streets from a new breed of begans who refuse to take no for an answer.

One man was stabbed to death and another seriously wounded near Berkeley Square last month.

Williams was a classic exam-ple of the new breed, running what one officer in the case described as 'a nice little oper-ation'.

Atton. He did little begging himself but had a network of teams of young girls who preyed on tourists and workers around Covent Garden. He took a cut of their collections which could average £30-a-day each.

Racket

Police believe he was also a key figure in a racket known as 'taxing', robbing the genu-inely homeies. Although he sometimes slept rough, he had a family home in Camden Town, North London.

Town, North London. Such is the money to be made from begging — there is considerable in-fighting over who controls the most lucra-tive pitches — that known criminals are being drawn in. Williams had convictions for both violence and begging. Police here set un an under

both violence and begging. Police have set up an under-cover operation, codenamed Taurus, to identify those pull-ing the strings' behind the mackets. It was their officers who arrested Williams.

Passing sentence yesterday Judge Brian Smedley, QC, told Williams, who admitted grisy-ous bodily harm, that begying was 'an unhappy feature' of London life.

Menace of the violent vagrants

But he warned that people who refused to hand over money should be entitled to 'feel safe'.

Mr Heraghty, who lives in Docklands, was approached by Williams and two other men as he left a Covent Garden re-taurant in December.

They were persistent and abusive, he said last night. But I kept reiterating that although felt sorry for them I would not give them anything.

He said the three kept shout-ing: 'Give us some money, you rich, fat bastard.'

rich, fat bastard." As he tried to walk away, they started to jostle him and then throw punches. But the former junior black belt at judo fought back and two of the men backed off. I wrestled Williams to the floor and told him 'Look, you do not want to fight me. I just "I wrest to go home."

want to go home." T began to walk away but 1 suppose he though the had a point to prove, he had lost face in front of his friends. I heard giass breaking and as 1 spun round he put the bothe in m face. There was a lot of blod and Williams ran off."

Later that night he went back with police and spotted his attacker.

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I WON'T BE COMING BACK, SAYS JAPANESE TOURIST

REGGARS who refuse to take BEGGARS who refuse to take No for an answer are spreading fear through London's West End. Visitors to the capital can no longer pretend not to see the outstreiched hands of the vagranis asking for money. For the dishevelled scroungers may pursue them along the street, blocking their path them turning violent as they demand cash. The menace was highlighted at the Old Balley last week when

Edmund Williams, nicknamed London's King of the Beggars', was sailed for four years for ramming a broken bottle into the face of a City broker who refused him money. With tourism officials asying the problem is starting to deter foreigners from visiting the orbital, the Daty West End at the weekered to watch the beggars at work.

Menace of the beggars who strike fear in heart of London

THEY walked anonymously out of the theatre and into the rain, chatting happily about the show they had just seen.

There were Japanese and American tourists, parties from the Home Counties, courting couples — a typical weekend audience in London's West End.

omoon's west End. What was about to happen to them is, sadly, becoming fairly typical too. hey found themselves targets of one of the gangs of drunken begars now emacing the heart of the capital. By the time their ordeal was over the sowgoers had forgotten all about what they saw on stage. The foreigners mong them would return home, talking not of the dreadful English eather or the world-famous sights. They would remember London for an infused, terrified ... and in

and, in er to re-

Jostled

the beggars, so drunk he rdly stand, pushed a brown g in front of the woman's wing her the bottle inside as

group

ist, Mr Ma-med to help, Britain but feeling. The because she ing on. I will this part of he same gang of beggars

Special investigation by DAVID GARDNER and JOHN REES

give t

Weapons

Wilson's fears are not a as the distinction betw and mugging beco welloe say the new bree beggi and mugging Police say the new who are blighting are getting increa-their efforts to ext

Tourism chiefs, already reeling on with

Being approached by beggars is from the efficies of recession and the part of a hight out in town these Guilf War, may London's growing days, the said. Thas happened to reputation as a dangerous city is me at railway and Tube stations. also taking its toll on the number of These are also a lot of them around places like Owent Garden. This landle has made that hight of down I now what would happen

'King of the Beggars' knocked off throne

The

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money to i jail terr returned t there they



TRAMP PLAGUE IN LONDON.

TO THE EDITOR OF " THE DAILY TELEGRAPE."

SIR-Small-pox is rampant in London; scarlet fever and diphtheria are increasing in every part of the metropolis in an alarming degree. Medical officers of health, sanitary inspectors, and other district officials are bravely doing their best to meet and defeat one of the most dangerous outbreaks of disease that London has known for many years past; but there is one department which—as far as anyone's general observation can make out—seems to do nothing whatever to assist the municipal authorities at this juncture. The department I allude to is that which controls the Metropolitan Police. At this moment

The department I allude to is that which controls the Metropolitan Police. At this moment there are more professional vagrants and tramps "smouching" about the streets of London than usual, and they are of the filthiest description. Every report respecting the spread of small-pox and acarlet fever—not to mention diphtheria shows that infection is being carried about the streets by the verminous tramps, who are now a positive plague in London. As soon as they collect any money they adjourn to a public-house, and there, by their close contact with others, insure the dissemination of disease. These vagrants and in the parks, jostle up against passer-by, and undoubtedly are accountable for much of the increase of the illnesses now so prevalent.

One would imagine that, under the existing circumstances, the Metropolitan Police would be instructed to "run in " people who are obviously tramps and loafers—persons not having any visible means of subsistence—and have them disinfected and vaccinated. I suppose, however, the latter process is impossible under the existing idiotic legislation, but, at any rate, steps abould be taken by the police largely to clear the London streets and the parks—especially those parts where children are acoustomed to play—of what is now a dangerous nuisance. As far as one can judge, the Metropolitan Police are doing absolutely nothing in this direction. They look on with unmoved complacency when they see some appallingly loathome object rub up against his fellow-creatures, with the risk of communicating to them some hideous disease. In passing, I may add that to a great many

In passing, I may add that to a great many who pay for the said police it sometimes seems that nowadays that force exists principally for the regulation of street traffic. Of course, it will be said that the streets are free to all. So they are; but with certain exceptions. A very drunken man or anyone going about with a drawn hnife would not be allowed to continue his wanderings. Why, therefore, should an invasion of the lowest and most disgusting human beings, bringing with them discess and filth, be permitted to poison the streets of London ? We should at least insist that they should repair to some place where they could be cleansed. As it is, they are a positive danger to our parks and public places, and their shameless appearance among decent people is a disgrace to the management of London.