

1 **Evaluations of accents can be used as a measure of prestige**

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11

12 **Abstract**

13 Sociolinguistic studies have established that people make judgements about
14 speakers based on accent. Standard and non-standard accents have differing
15 levels of prestige and demonstrate variation across other attitudinal terms.
16 Because prestige can increase the likelihood of information transmission, we
17 explore variation in accent prestige to determine whether accent can be used as
18 a measure of prestige in social transmission experiments. Participants ($n=152$
19 US; 142 UK) were presented with standardised recordings of a standard passage,
20 containing lexical terms that highlight phonological differences between accents
21 of English. Passages were spoken by middle-aged white male speakers
22 representing a range of eight accents from the listener's country of residence and
23 two from the alternative country. Participants rated the speakers on 24 different
24 personal qualities including traits associated with prestige and friendliness. As
25 predicted, participants rated the standard accents favourably for prestige across
26 both locations. Participants perceived location-specific non-standard accents as
27 having lower prestige, and accents deemed as having lower prestige as being
28 friendlier. Accent indexes differential qualities for listeners, regardless of
29 whether the concept is operationalised by the term "prestigious" or multiple
30 terms related to 'prestige'. We assert that accent can be used as an indicator of
31 prestige in the absence of other prestige information and demonstrate the
32 importance of locally calibrating the accents used in prestige-based social
33 transmission experiments.

34

35 **Keywords:** cultural evolution; sociolinguistics; prestige; language attitudes; accent; social
36 transmission biases

37 **1. Introduction**

38 Prestige bias has been well-studied in the cultural evolution literature in
39 evaluating the reasons why particular cultural traits are adopted over others.
40 Here, we demonstrate how accent is a potential source of information bias in
41 social learning, and this work is motivated by the need for a widely shared
42 experimental mechanism of establishing prestige information. Although prestige
43 can be indexed in many ways; experiments have tended to focus on attentional
44 cues or deference as measures of prestige (Atkisson, Mesoudi, & O'Brien, 2012;
45 Brand & Mesoudi, 2019; Chudek, Heller, Birch, & Henrich, 2012; Henrich & Gil-
46 White, 2001; Jiménez & Mesoudi, 2019b). This is problematic because greater
47 attention and deference are not just cues of prestige but a direct outcome.
48 Accent, in contrast, is a relatively stable and accessible proxy for prestige across
49 a broad range of speakers.

50 Accent is the variation in how speakers of a common language pronounce
51 words and, beyond the specific language variety itself, can index a variety of
52 social factors (e.g. age, gender, ethnicity, social class). Accents are typified by the
53 proportion of specific linguistic variants expressed (e.g. the relative usage of
54 phonemes [a:] and [æ] in 'bath' or 'trap'), and have been shown to be sufficiently
55 varied to stimulate differences in social preferences for even preverbal infants
56 (Kinzler, Dupoux, & Spelke, 2007).

57 As some accents are regionally bound (Alford & Strother, 1990; Clopper &
58 Pisoni, 2006; Labov, Ash, & Boberg, 2005; Shackleton, 2007; Wells, 1982), accent
59 can be used as a reliable marker of group identity. This is likely because accent is
60 an honest signal; whilst some people can mimic other accents, it is difficult to
61 maintain, especially when vernacular speech is elicited (Cohen, 2012). Accent
62 can, therefore, be used to reliably infer social information about the speaker and
63 can be used in transmission studies to make judgments about which individuals
64 (models) to copy.

65 Many studies have demonstrated that accent can be used to determine
66 different types of social information about individuals and also with whom we
67 associate and trust (Harris & Corriveau, 2011; Kinzler, Corriveau, & Harris, 2011;
68 Kinzler & DeJesus, 2013; Lev-Ari & Keysar, 2010). As one example, English-
69 speaking children in the USA prioritise accent cues over visual cues of race when
70 identifying others as in-group or not (Kinzler, Shutts, DeJesus, & Spelke, 2009).

71 Sociolinguists have demonstrated that people evaluate speakers by their
72accents for attitudinal qualities including prestige (Alford & Strother, 1990;
73Bayard, Weatherall, Gallois, & Pittam, 2001; Bishop, Coupland, & Garrett, 2005;
74Boucher, Hammock, McLaughlin, & Henry, 2013; Brown, Giles, & Thakerar, 1985;
75Callan & Gallois, 1987; Coupland & Bishop, 2007; Fuertes, Gottdiener, Martin,
76Gilbert, & Giles, 2012; Giles, 1970). In the sociolinguistic literature, accent-based
77prestige is often considered a population-level attribute and related to whether
78an accent is deemed a standard form or not, rather than being determined by an
79individual's success or expertise. Standard accents (e.g. "Received
80Pronunciation", "General American") are often considered to carry prestige and
81are not locality-specific (Morales, Scott, & Yorkston, 2012). These accents
82develop through a process of standardisation, usually at the establishment level,
83and are therefore deemed an ideological aspiration (Coupland, 2003; Coupland &
84Bishop, 2007). As such, the sociolinguistic literature distinguishes two types of
85prestige: (i) 'overt prestige', where listeners consciously ascribe positive status
86to a linguistic variable (i.e. accent difference) due to determinable attributes such
87as 'niceness'; and (ii) 'covert prestige', in which there is speaker movement
88toward linguistic variants that do not broadly have positive connotations
89(Meyerhoff, 2011). In this way, all accents (including non-standard, and foreign
90accents) can theoretically be afforded prestigious status (Hawkey, 2016).

91 Studies of accent perception have already been fruitfully applied in
92domains such as marketing (Laiwani, Lwin, & Li, 2005; Lwin & Wee, 1999;
93Morales et al., 2012; Tsalikis, Ortiz-Buonafina, & LaTour, 1992; Z. Wang, Arndt,
94Singh, Biernat, & Liu, 2013) and education (Eisenclas & Tsurutani, 2011; Gill,
951994; Rubin & Smith, 1990; H. Wang & Heuven, 2004). Although taken together
96these studies have considered a range of global accents of English, accent
97perception is usually tested with a single population. It is therefore unclear
98whether these perceptions are stable across populations. We argue that accent is
99a potentially useful cue of prestige that can be employed in experimental studies
100of human behaviour, including those on cultural transmission and evolution.
101Previous experiments investigating a prestige effect have provided information
102about the individual model, or attentional and deferential cues (Atkisson et al.,
1032012; Brand & Mesoudi, 2019; Chudek et al., 2012; Henrich & Gil-White, 2001;
104Jiménez & Mesoudi, 2019a), but many instances of everyday social information

105transmission employ spoken language (e.g. teaching). If we can establish the
106utility of using accent as a cue for prestige, we can expand the variety of
107experimental designs we use, and ground social transmission studies in
108increasingly realistic behaviour. By using accent as a proxy for prestige, we can
109use speech on its own as an experimental manipulation, and therefore remove
110the complex, contextual, and poorly understood confounds of visual cues of
111prestige (e.g. posture and clothing (Daloz, 2009; Fişek, Berger, & Norman,
1122005)). Furthermore, we can attenuate the self-perpetuating aspects of prestige
113in the visual modality such as attention and deference: by paying attention to
114someone who others are paying attention to, we run the risk of contributing to
115their perceived prestige irrespective of whether initial attention is due to
116prestige.

117 The aims of this paper are twofold: a) to replicate previous language
118attitude studies to determine whether attitudes towards different accents of
119English are both stable and widely shared, and therefore, can act as a reliable
120source of social information bias; and b) to specifically investigate how those
121accents differ in prestige. Here, we present results from a language attitude
122survey where we presented a range of locally calibrated standard and
123nonstandard accents to participants. We expect that 1) accents are rated
124differentially on measures of prestige; 2) standard accents will have greater
125prestige; and 3) non-standard accents will be perceived as less prestigious.

126

127 **2. Methods**

128

129 2.1 Ethical statement

130We obtained ethical approval from the University of Bristol Faculty of Arts
131Research Ethics Committee (protocols #31041 and #38323) and Colorado State
132University Institutional Review Board (protocol #014-16H).

133

134 2.2 Participants

135We recruited participants for this task through online platforms Amazon
136Mechanical Turk and Turk Prime, and Prolific Academic for US ($n = 152$) and UK
137($n = 142$) samples respectively. We compensated participants for their time at

138 rates above local minimum wages; rates were based on the time taken to
139 complete the tasks.

140

141 2.3 Protocol

142 Participants from the US and the UK answered a short demographic
143 questionnaire and were presented with ten recordings of differently-accented
144 speakers reading the *Comma Gets a Cure* passage (Honorof, McCullough, &
145 Somerville, 2000), a piece of text specifically written to discriminate between
146 accents of English. Of the 10 recordings, eight were from the country in which
147 the participant was based, and two were from the other country, providing a
148 robustness check and a measure of how widespread accent perceptions are.
149 Based on previous literature (Coupland & Bishop, 2007; Giles, 1970; Labov et al.,
150 2005; Shackleton, 2007) we chose accents that represented both high and low
151 prestige across both their own country and the other country. All speakers
152 recited the same passage, so we presented participants with only the first
153 paragraph of the passage (approximately 30 seconds) to shorten the overall
154 length of the study and to ensure that participants' engagement with the task
155 was not compromised due to attention loss. We informed participants that they
156 would hear the same passage in each recording and were not required to pay
157 attention to content, allowing them to focus on the voices. As they listened to
158 each recording, participants rated the speakers on a seven-point Likert-type
159 scale for 24 attitudinal variables.

160

161 2.4 Recordings

162 All but two recordings were sourced from the International Dialects of English
163 Archive (IDEA: <https://www.dialectsarchive.com/>). This archive stores over one
164 thousand samples of speech in English comprising recordings and interviews.
165 For many of these recordings, phonetic transcripts are provided, as well as a
166 detailed history of where the speakers have lived. We used recordings of white,
167 male speakers between the ages of 31 and 59 years (mean age = 47.7 years), as a
168 previous unpublished pilot study found that younger, female voices were
169 deemed less prestigious overall. We also included speakers who fit the
170 demographic category with Colorado (American West) and Welsh accents who
171 we recorded, diversifying our range of accents.

173 **Table 1. Accents used from the UK and USA. Accents listed in bold were presented to both**
 174 **populations.**

	<i>UK Recordings</i>	<i>US Recordings</i>
Standard	Received Pronunciation SE England	Colorado (West, urban) Wyoming (West, rural) Oklahoma (Midland)
Non-standard	Ireland NW England Scotland SW England	Illinois (Inland North) New York City North Carolina (Inland South, blue collar)

175

176 Recordings from IDEA are categorised by location: the USA recordings are
 177 indexed by state, and the UK material are by broad geographic area. The
 178 recordings chosen were cross-referenced with dialect areas as defined by Labov
 179 et al. (2005) for USA accents and Shackleton (2007) for UK accents, providing
 180 both regional coverage and accent variation. As Labov et al. (2005) classify six
 181 regional accent areas in the USA (North, West, New England, New York City and
 182 Mid-Atlantic, Midland and South), two recordings representing the West and
 183 Inland South accent are included from speakers who differ in occupation. We did
 184 not test New England accents due to lack of quality recordings available for
 185 speakers with the desired demographic characteristics. The accents presented to
 186 both UK and US participants were representative of standard (UK: Received
 187 Pronunciation and Southeast English accents; USA: "General American" [West
 188 and Midland] accents) and non-standard variants (Cheshire, 1991; Trudgill &
 189 Hannah, 2008) (see Table 1).

190 *Comma Gets a Cure* is a passage containing terms from J.C. Wells' lexical
 191 set (1982). The first paragraph included the following words, which highlight
 192 phonological differences between accents: NURSE, HAPPY, START, NORTH,
 193 SQUARE, FACE, DRESS, FLEECE, and KIT. The variation in vowel space used for
 194 these words is listed for RP and General American in this lexical set (Evans &
 195 Iverson, 2004), and can be diagnostic for different regional accents (Evans &
 196 Iverson, 2004). As such we expect these recordings demonstrate sufficient

197diversity for participants to either identify or make judgments based on different
 198accents.

199

200 2.5. Attitudinal Variables

201Table 2. Attitudinal variables evaluated by participants. Terms in bold are included in the Position-
 202Reputation-Information scale of prestige (Berl, Samarasinghe, Jordan, & Gavin, 2019). Status,
 203solidarity and dynamism dimensions taken from Fuertes et al. (2012).

<i>Unclassified</i>	<i>Status</i>	<i>Solidarity</i>	<i>Dynamism</i>
prestigious powerful reputable respected successful driven skilled warm comforting enthusiastic	high social status wealthy (un)intelligent educated (un)ambitious talented clear	(un)kind good natured	hardworking friendly aggressive active confident

204

205We selected attitudinal variables across domains of status, solidarity and
 206dynamism based on the most common terms from previous language attitude
 207studies (Fuertes et al., 2012). We also designed this experiment to test the
 208Position-Reputation-Information (PRI) scale of individual prestige, the results of
 209which we have presented and discussed in a separate paper (Berl et al., 2019)
 210(see Table 2). We include PRI terms to capture aspects of prestige not previously
 211considered in other language attitude studies (Brown et al., 1985; Callan &
 212Gallois, 1987; Fuertes et al., 2012; Giles, 1970; Gill, 1994; Levin, Giles, & Garrett,
 2131994). We asked participants to rate accents for the terms in Table 2 where 1
 214was ‘strongly agree’ and 7 was ‘strongly disagree’. The scale was reversed for
 215some of the terms to ensure that participants’ attention was held and to reduce
 216response bias (Schriesheim & Hill, 1981). Negative forms of the intelligent,
 217ambitious and kind were used by supplying “un-” as a prefix. We randomised the
 218order in which we asked participants about these terms for each accent
 219recording. An additional artificial speech recording was included with
 220instructions to rate all terms beginning with consonants a “7” and all terms
 221beginning with vowel a “1” as an attention check.

222

223 2.6 Data Analysis

224 We prepared and analysed data using the *stringr*, *reshape*, *FactoMineR* and *base*
225 R packages. Participants vary in how they use the Likert scale, so we calculated z-
226 scores so that responses were comparable to the mean. Although we included
227 the term “prestigious”, previous research shows that ‘prestige’ is multifaceted
228 and participants operationalise various definitions of prestige in experimental
229 contexts (Berl et al., 2019). A Principal Component Analysis (PCA) was run to
230 capture the majority of the data with a reduced number of variables. The PCA
231 was conducted in the *FactoMineR* and *factoextra* packages, Welch’s ANOVA was
232 carried out using one way tests with all other statistical tests carried out in the
233 *base R* package. Boxplots were created using *ggplot2*.

234

235 3. **Results**

236

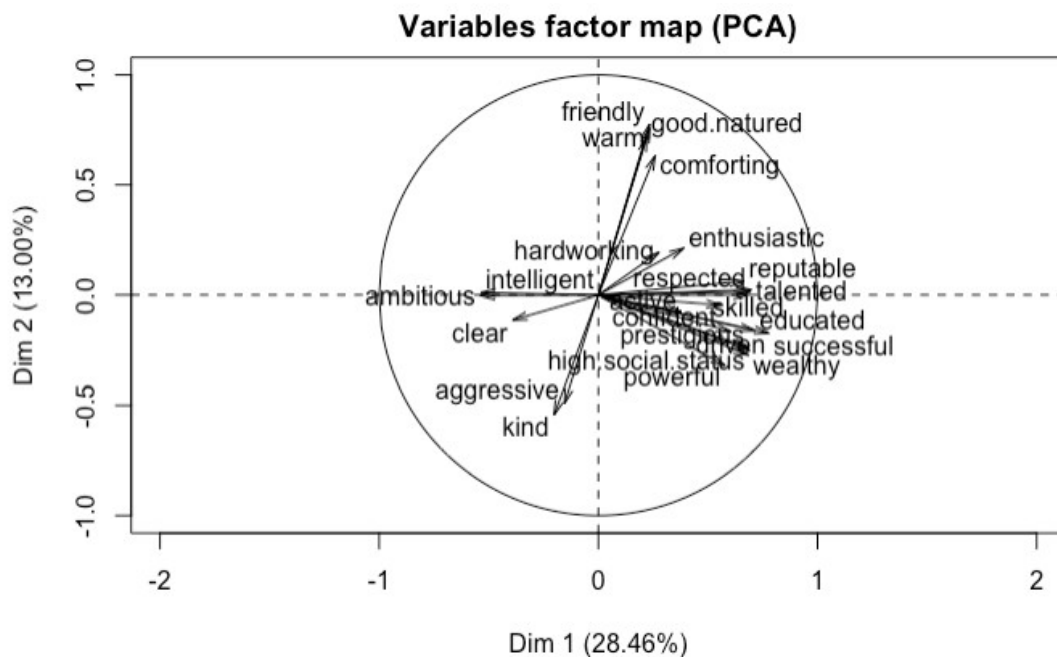
237 To consolidate the number of variables, we ran a PCA on all respondents’ data for
238 their evaluative ratings on the different attitude variables (e.g. friendly, skilled)
239 across accents. We find that attitudinal variables cluster. Five components have
240 eigenvalues greater than 1, which accounts for 56.2% of the variation.

241 Component 1 accounts for 28.5% of variance and terms here relate to status or
242 prestige domains. Component 2 accounts for 13% of variance and corresponds
243 to friendliness, or terms that we would expect in line with the solidarity and
244 dynamism domains (Figure 1). We also compared these dimensions to how
245 “prestigious” (Figure 2) and “friendly” (Figure 3) participants rated the different
246 accents. Components 3, 4 and 5 explain 5.7%, 5.3% and 3.8% of the variance,
247 respectively. Component loadings for all attitudinal variables can be found in
248 Table S1.

249 Attitudinal measures of “ambitious” (-0.54) and “clear” (-0.39) correlated
250 negatively with the prestige dimension, a result which contradicts previous
251 research arguing that both terms are status driven (Fuentes et al., 2012). In
252 support of this finding, in our other work both of these terms also dropped out of
253 the PRI scale of individual prestige due to clustering with other domains (“clear”)
254 or low salience for prestige with participants (“ambitious”) (Berl et al., 2019).
255 These results support the omission of these terms from status or prestige

256 domains. However, the negative relationship between “kind” and the friendliness
 257 dimension is also unexpected. However, as “kind” was one of the reversed terms
 258 and presented to participants in the negative form “unkind”, this may be due to
 259 participants losing attention. We found that participants were less inclined to
 260 rate reversed terms at extreme parts of the scale.

261



262

263 **Figure 1. Principal Components Analysis (PCA) showing attitudinal variables along Prestige (Dim 1)**
 264 **and Friendliness (Dim 2) dimensions.**

265

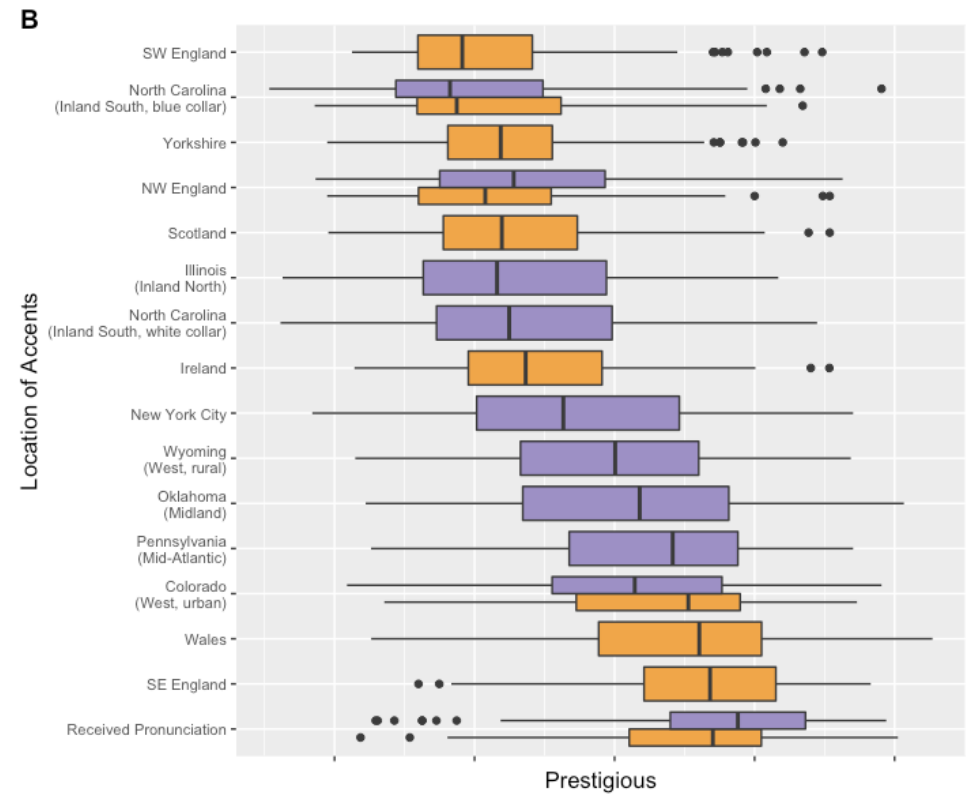
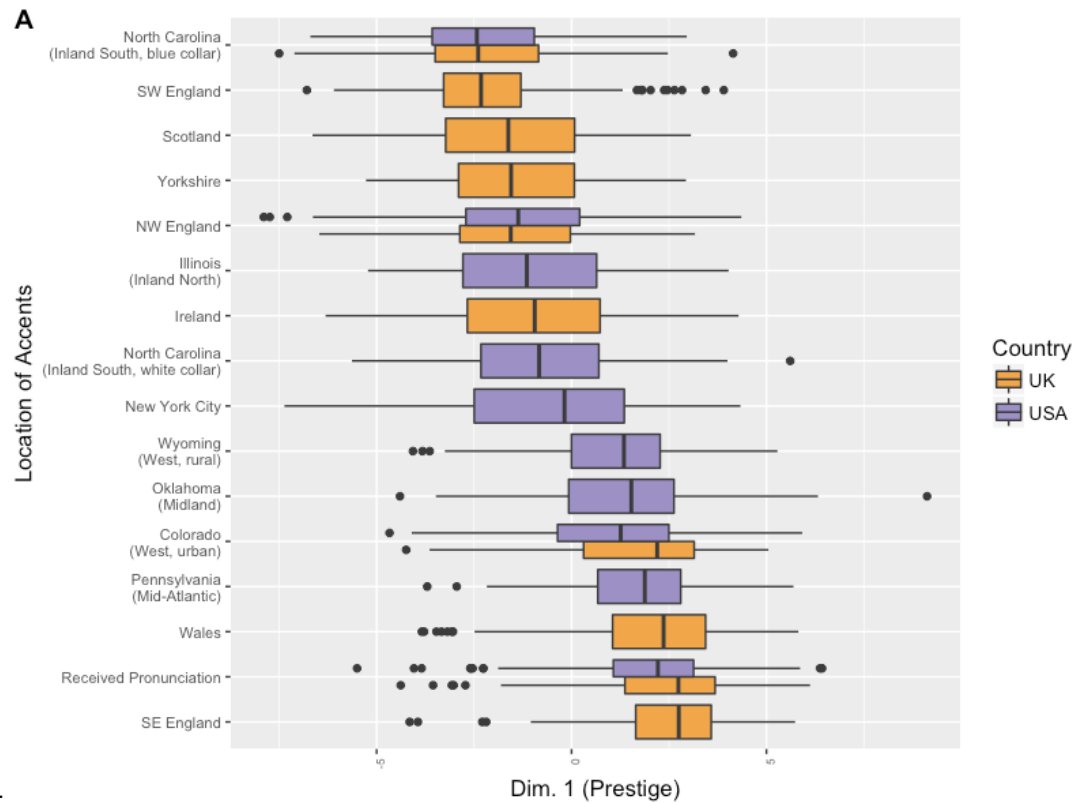
266 Assumptions for normality and homogeneity of variance were not met for the
 267 one-way ANOVAs for both prestige and friendliness; therefore, we deemed
 268 sample size sufficient for Welch’s ANOVA. For the prestige dimension (Figure 2),
 269 we found a statistically significant difference between accents ($F(15) =$
 270 $134.84, p < 0.001$). Pairwise comparisons using Wilcoxon rank sum tests using
 271 the Benjamini and Hochberg (BH) p-value adjustment method found significant
 272 differences between participant’s evaluations of prestige for the accents
 273 highlighted in Table S2. These results demonstrate variance in responses to
 274 accent prestige and are consistent with the hypothesis that standard accents (e.g.
 275 Received Pronunciation and General American accents) are rated more
 276 favourably for prestige over non-standard accents. Participants rated the Welsh
 277 accent favourably for prestige despite previous studies concluding that Welsh is

278 usually ranked as middling for prestige and social attractiveness (Bishop et al.,
279 2005; Coupland & Bishop, 2007; Giles, 1970), but, as this was recorded recently
280 by the authors, this may be due to better sound quality.

281 For the friendliness dimension (Figure 3), Welch's ANOVA ($H(15) =$
282 44.521 , $p < 0.001$) determined there was a statistically significant difference
283 between groups. Pairwise comparisons using Wilcoxon rank sum tests (with the
284 BH p-value adjustment method) showed that there were significant differences
285 between participant's evaluations of friendliness for the accents highlighted in
286 Table S3.

287 Here, we find that Southeast England English is rated most highly for
288 prestige by UK participants but ranked considerably lower for friendliness.
289 Regional accents from the West of England are considered favourably for
290 friendliness. USA participants rated Mid-Atlantic and Western accents
291 (consistent with "General American" accents) highly for prestige but rated
292 Received Pronunciation as the most prestigious accent. The Inland South accent
293 was rated low for prestige but highly for friendliness.

294

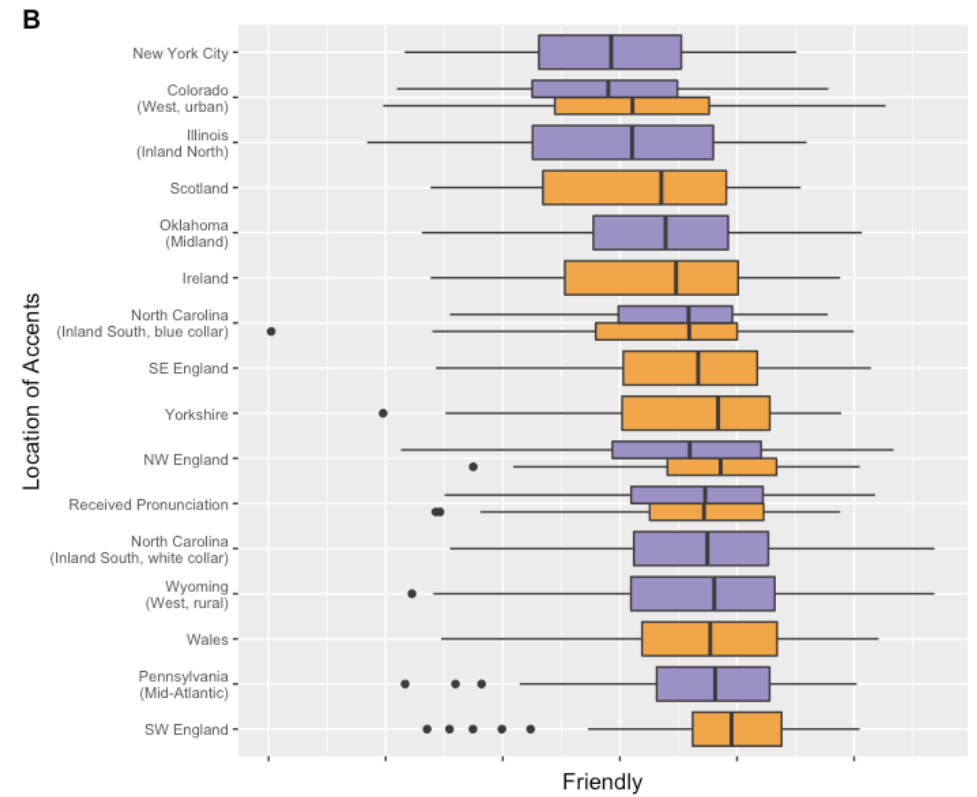
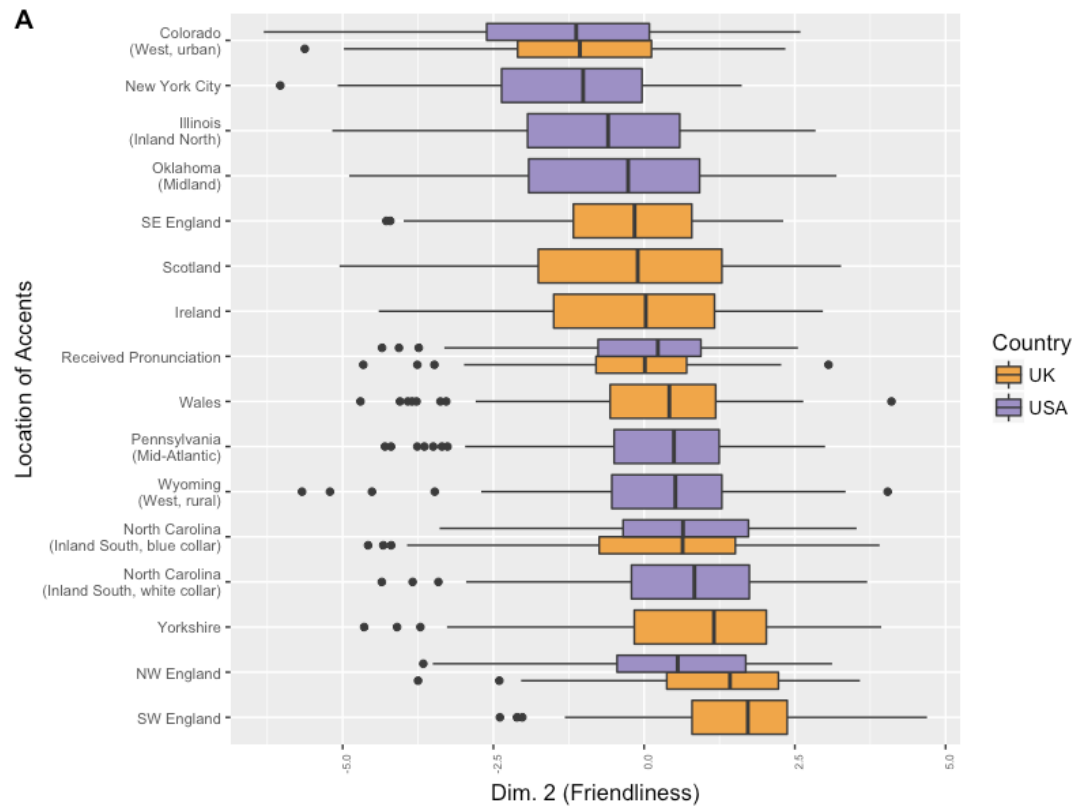


295

296 **Figure.2. Perceived prestige of regional accents of English.** Each boxplot represents the distribution of responses of participant scores for A) Dim. 1 (Prestige) and B) the variable
 297 “prestigious” where 0 is neutral after standardisation. The hinges correspond to the first and third quartiles and the central line represents the median. UK participants rated accents
 298 with orange boxplots and US participants rated accents with purple boxplots. Accents with two boxplots were presented to participants in both locations.

299

300



301

302 **Figure 3. Perceived friendly of regional accents of English.** Each boxplot represents the distribution of responses of participant scores for A) Dim. 2 (Friendliness) and B) the variable
 303 “friendly” where 0 is neutral after standardisation. The hinges correspond to the first and third quartiles and the central line represents the median. UK participants rated accents with
 304 orange boxplots and US participants rated accents with purple boxplots. Accents with two boxplots were presented to participants in both locations.

305 4. Discussion

306

307 4.1 Accents can be used to index social characteristics

308 Our results show that participants are able to make discriminatory judgments
309 about the social characteristics of speakers based on accent alone. In the absence
310 of any other information and provided with the same content, participants
311 differentially rated speakers across many attitudinal variables (Figure S1). The
312 results of our PCA suggest that attitudinal variables cluster along dimensions
313 that might index prestige and friendliness. That these categories can be
314 manifested through accent is potentially useful because these domains also
315 broadly correspond to prestige and familiarity biases in the CE literature, which
316 suggests that accent might be operationalised as a cue for these factors in CE
317 experiments.

318

319 4.2 Accents demonstrate differential prestige

320 For British and American English speakers, accents show differential prestige
321 (Figure 2). Participants rated the “General American” cluster of accents
322 (West/Midlands) and RP—all standard forms of English—favourably for prestige
323 across both locations. This finding contributes to a body of research suggesting
324 that we associate prestige with standard varieties (Brown et al., 1985; Coupland,
325 2003; Coupland & Bishop, 2007; Giles, 1971, 1973; Giles & Sassoon, 1983;
326 Milroy, 2007; Milroy & Milroy, 1999). However, participants in both countries
327 rated RP highest for prestige, implying that the prestige of this particular variety
328 is stable and widespread. This result has been found elsewhere, which is likely to
329 be an artefact of the British colonial past (Stewart, Bouchard Ryan, & Giles,
330 1985). “General American” accents were also rated highly so our results are
331 unlikely to be a case of cultural cringe, whereby participants are less favourable
332 towards accents similar to their own (Bayard et al., 2001; Eisenchlas &
333 Tsurutani, 2011; Pickles, 2011). We might expect that some level of in-group
334 association is necessary for prestige to be relevant, however, here we show that
335 prestige can be afforded to out-group members. As US participants rated RP as
336 having the highest prestige, this suggests that we cannot make assumptions

337about the relevancy of accents and should be testing and locally calibrating the
338accents used in accent-based studies.

339

340 4.3 Regional accents are perceived as friendlier

341In line with previous studies (Coupland & Bishop, 2007; Giles, 1970; Kinzler &
342DeJesus, 2013), the top five friendliest accents (SW England, NW England,
343Yorkshire, blue collar North Carolina, white collar North Carolina) rated by our
344participants are regional/non-standard accents (see Figure 3). However,
345standard accents varied in their perceived friendliness. Prior research provides
346evidence to suggest that we associate stereotypes with location-specific accents
347(Boucher et al., 2013; Gluszek & Dovidio, 2010; Ladegaard & Sachdev, 2006), and
348so it may be more difficult to reconcile both positive and negative stereotypes
349with generalised accents. However, standard accents may still be deployed as an
350outgroup when considering solidarity-related biases because they are usually
351non-geographically specific. In this case it is difficult to form a shared identity
352based on accent alone.

353

354 4.4 Prestigious accents are less likely to be considered friendly

355In general, participants perceived location-specific non-standard accents as
356having lower prestige. Conversely, of the four accents presented to both listeners
357in both locations, participants perceived those deemed as having lower prestige
358as being friendlier, which may suggest that a trade-off exists between being
359deemed prestigious or friendly (Coupland & Bishop, 2007; Kinzler & DeJesus,
3602013; Laiwani et al., 2005; Morales et al., 2012; Stewart et al., 1985).

361 However, if we are to posit that non-standard regional accents are
362perceived as friendlier, RP might be considered a special case. Participants did
363not rate RP as unfriendly, despite its high prestige score, as expected for both UK
364and US participants. This outcome may be because RP has often been associated
365with the 'Queen's English,' which has variable connotations depending on the
366listener. For example, other language attitude surveys found older individuals
367and participants in Southeast England hold positive attitudes towards 'Queen's
368English', but this accent is deemed socially unattractive in Celtic fringe regions

369such as Northern Ireland, Scotland and Wales, potentially a consequence of
370socio-political context (Bishop et al., 2005; Coupland & Bishop, 2007). As such,
371RP may index a specific socio-political context that may be deemed socially
372attractive internationally.

373

374 4.5 Accents as a robust proxy for prestige

375Across both populations, participants' responses to the relevant standard and
376regional/non-standard accents were similar. Participants were also able to
377identify the accents from the alternative country as high or low prestige, and
378evaluated these accents in line with participants from the other country. This is
379an interesting finding because, although we might expect associations with
380accent to be based on familiarity, our results suggest that these two populations
381share attitudes toward accent notwithstanding group affiliation or lack thereof.
382This may be partially due to working with Global North populations only, who
383may have greater exposure to multiple accents of English in media. Nevertheless,
384for the populations studied, our results replicate previous language attitude
385surveys (Bishop et al., 2005; Boucher et al., 2013; Bresnahan, Ohashi, Nebashi,
386Liu, & Shearman, 2002; Giles, 1970; Kinzler & DeJesus, 2013; Ladegaard &
387Sachdev, 2006), suggesting that these attitudes are stable and widespread, and
388therefore can be effectively deployed as a cue for prestige, and potentially other
389social information.

390Accent has not previously been used in social transmission experiments, and
391prestige has often been established through attentional cues or deference
392(Atkisson, Mesoudi and O'Brien, 2012; Chudek et al., 2012; Henrich and Gil-
393White, 2001; Jiménez and Mesoudi, 2019b). However, in any transmission event
394that relies upon the use of speech or verbal cues, accent prestige may be an
395additional confound that is unaccounted for. We suggest that researchers at the
396very least should consider the effects on their studies if accent is a carrier of
397social information cues.

398 Accent offers further potential benefits to the experimental study of
399prestige. Individuals can independently evaluate whether a person is prestigious
400based on their own information, without relying on cues from third parties.

401Relatedly, attention/deference measures can only convey prestige to the
402individual receiving the attention, whereas accent prestige is a property of
403(multiple) individuals and groups, and allows for greater scope in exploring
404models of social information transmission. The variance in prestige across
405accents of English shows that accent can be used as an indicator of prestige in the
406absence of other prestige information, and, thus, could be used as a broadly-
407shared cue of prestige bias. Aspects of language (e.g. accent, prosody, gesture etc)
408beyond propositional content have been underexplored by social learning and
409cultural evolution researchers and we hope our results show that there is much
410to learn. Finally, further research to examine prestige evaluation effects in
411languages other than English would be valuable in establishing this phenomena
412more generally.

413

414 **5. Acknowledgments**

415The recordings used in this project (with the exception of Colorado and Wales,
416which were recorded by the authors) are used by special permission of the
417International Dialects of English Archive, online at
418<http://www.dialectsarchive.com>. *Comma Gets a Cure* is copyright 2000 Douglas
419N. Honorof, Jill McCullough & Barbara Somerville, text available online at: [http://](http://www.dialectsarchive.com/comma-gets-a-cure)
420www.dialectsarchive.com/comma-gets-a-cure. The Max Planck Institute for the
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422

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