

Chapter Three

Politics, class and pronunciation: Onset /r/ and party affiliation in Scottish politics

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Abstract

The present study investigates the realisation of onset /r/ among 24 Scottish politicians of three different parties (Conservatives, Labour, SNP) in the Scottish Parliament while controlling for intralinguistic and sociolinguistic factors. The research aim was to find out whether party membership can account for phonetic variation in Scottish politics. Data preparation was supported by different speech recognition and forced alignment tools and the analysis implemented conditional inference tree modelling. The results show that, apart from intralinguistic factors, such as the preceding sound, political party membership has a significant influence on the realisation of onset /r/ among Scottish politicians. Whereas SNP and Labour politicians show greater variation in the realisation of onset /r/, the Conservatives show a clear tendency towards realising approximants in onset position.

Keywords: Scottish Standard English, Sociophonetics, Conditional Inference Tree Modelling, Politics

Weilinghoff, Andreas. 2024. 'Politics, class and pronunciation: Onset /r/ and party affiliation in Scottish politics'. In Christine Elswiler (ed.). *The languages of Scotland and Ulster in a global context, past and present. Selected papers from the 13th triennial Forum for Research on the Languages of Scotland and Ulster, Munich 2021*. Aberdeen: FRLSU, pp. 71–90. ISBN: 978-0-9566549-7-7.

1 Introduction

This study investigates the relationship between political party membership and phonetic variation in the Scottish parliament. Previous studies have found a significant correlation between political affiliation and pronunciation. Hall-Lew, Coppock and Starr (2010 and 2012), for instance, investigated the second vowel in the word *Iraq* produced by politicians in the US House of Representatives and found that Republican politicians are more likely to use the nativised /æ/ pronunciation than politicians of the Democratic Party, who are more likely to use the /ɑ:/ variant. Political party membership was a significant predictor in the analysis, other demographic factors showed no significant effect. Hence, there seems to be a correlation between political affiliation and pronunciation, which was also found in other studies investigating the speech of politicians in the US and England (i.e., Podesva et al. 2012; Kirkham and Moore 2016).

Scotland provides another very suitable context in which the interrelation between phonetic variation and political identity can be investigated. A fundamental political division between the three biggest parties in the Scottish Parliament concerns the question of independence. Whereas Labour and the Conservatives are UK-wide unionist parties, the Scottish National Party (SNP) only represents Scottish constituencies and continuously campaigns for Scottish independence. Thus, whereas the Conservatives and Labour are British and Scottish at the same time and need to negotiate these identities, the SNP is solely Scottish and wants Scotland to be an independent country (Leith and Soule 2011: 40). The crucial question here is whether these differences are also reflected in language use. A previous study by Boyd (2012) analysed the realisation of the /a/ vowel in the Scottish Parliament. In contrast to Southern Standard British English (SSBE), Standard Scottish English (SSE) has no quality difference between the vocalic nuclei in words such as *bad* and *balm*. Both vowels are represented by the

lexical set CAT in Scottish English (Johnston 1997: 484; Wells 1982: 403). Boyd (2012) found that the vowel height among Labour politicians is more variable than among their SNP colleagues. This means that Scottish Labour politicians have more variable pronunciations in words such as *bath*, *trap*, or *start*, although these words are usually realised with the same vowel /a/ in Scottish English. Boyd (2012) concludes that the greater variability of Scottish Labour politicians provides further evidence that phonetic variation can be an index of political party affiliation. Hall-Lew, Friskney and Scobbie (2017) report similar findings when comparing the CAT lexical set among five Labour and five SNP politicians in the House of Commons. While the Scottish politicians do not have the same pronunciation as the English Members of Parliament (MPs), the Scottish Labour MPs produce significantly higher CAT vowels than the SNP MPs. The researchers fitted mixed-effects models in their analysis and controlled for the sex, age, class and regional background of the politicians, but only the factor political party showed significant effects. The researchers, therefore, conclude that ‘political party is a potentially rich social factor to include in studies of sociophonetic variation’ (Hall-Lew, Friskney and Scobbie 2017: 359).

Previous studies predominantly investigated open vowel pronunciations and applied linear mixed-effects modelling for statistical analysis. The present study takes a new approach to assessing the influence of political affiliation on phonetic variation in Scotland by investigating the production of onset /r/ among Members of the Scottish Parliament (MSPs) from the three biggest parties (Scottish Conservative and Unionist Party, Scottish Labour and the Scottish National Party). Furthermore, this study will apply conditional inference tree modelling in its analysis. Onset /r/ was chosen because the distribution and realisation of this variable has not yet been investigated in the context of sociophonetic research on Scottish politicians. At the same time, the realisation and distribution of rhotic sounds is one of the most salient features distinguishing SSE from SSBE (Meer et al.

2021: 122) and rhotic sounds are also important regional and social variables within Scotland.

2 Rhotic sounds and onset /r/ in Scottish Standard English

SSE has been described as being ‘generally rhotic’ (Wells 1982: 10) with taps [ɾ] and trills [r̄] considered as traditional Scottish variants (Johnston 1997: 510). Yet, more recent studies have shown that trill realisations are very infrequent and that SSE can rather be considered variably rhotic (Stuart-Smith 2008: 64; Schützler 2013; Meer et al. 2021: 129). There is considerable sociophonetic variation, especially for postvocalic /r/ with an increasing use of retroflex postvocalic variants [ɻ] among middle class speakers and derhoticised variants among working class speakers (Lawson, Stuart-Smith and Scobbie 2018).

As for onset /r/, the most recent study reports that 60.1 per cent of all tokens are realised as approximants and that 37.1 per cent are pronounced as taps/trills in SSE (Meer et al. 2021: 8–11). Yet, it must be added that trills are much rarer than taps. This stands in contrast to SSBE which generally favours alveolar approximants [ɹ] in onset position. Furthermore, the realisation of onset /r/ is significantly influenced by language internal factors in SSE. Especially the preceding sound has a strong influence on onset /r/ realisations, with taps/trills articulated more frequently in intervocalic and word medial contexts (Meer et al. 2021: 125). In addition, tap/trill realisations are also more frequent in content words than in function words as well as in consonant clusters than in single /r/ contexts (such as in the word *right*) (Jauriberry, Sock and Hamm 2015; Schützler 2015: 129).

Based on the previous research outlined above, this study investigates whether party membership has a significant effect on the realisation of onset /r/ among Scottish Conservative, Labour and SNP politicians. The research hypothesis is that SNP politicians realise onset /r/ more frequently with the

‘traditional Scottish variants’ of taps or trills than Scottish Labour or Scottish Conservative MSPs.

3 Data and method

The data for this study was retrieved from Scottish Parliament TV (The Scottish Parliament 2022) and comprises 24 opening speeches introducing Member’s Business debates in the main chamber of the Scottish Parliament. Thus, the data represents carefully read speech in a very formal and comparable context as an MSP is addressing the whole chamber and discusses a particular motion or topic in a public session. All speeches were held between 2013 and 2020 and the average speech duration is 8 minutes.

3.1 Data selection

Following the approach of Hall-Lew, Friskney and Scobbie (2017), a superficially homogenous speaker sample was selected to account for sociolinguistic factors as well as possible. That is, eight speakers were selected for each party and all of them are male, white and were born and raised in Scotland. All of them are middle-aged (all over 45 years at the time of recording) and all of them lived and worked in Scotland for most of their lives. All speakers received their primary and secondary education in Scotland. Five of the speakers attended Scottish public schools and the remaining 19 speakers went to Scottish state schools. Furthermore, all except two speakers went to Scottish universities. Although it is difficult to classify the social background of the speakers, their Register of Interests (The Scottish Parliament 2021a) and their salary and pension schemes (The Scottish Parliament 2021b) reveal that they are all at least in a comparable socioeconomic situation at the time of recording. Another important factor that is accounted for in the analysis is the regional background of the speakers. The sample represents different regions of the country in a balanced way: five of the speakers grew up in the Eastern and seven speakers were raised in the

Western Central Belt. Four speakers grew up in the South of Scotland (Scottish Borders as well as Dumfries and Galloway) and eight speakers in the North (Northeast, Perth and Kinross as well as Highlands and Hebrides). An overview of the speaker sample can be found in Table 1.

Table 1: Overview of speaker sample with names, party affiliation, age at time of recording and regional background

Name (abbreviation)	Party	Age	Region
Alexander Stewart (AS)	Conservatives	54	North
Brian Whittle (BW)	Conservatives	52	West
Finlay Carson (FC)	Conservatives	50	South
Gordon Lindhurst (GL)	Conservatives	55	East
Jackson Carlaw (JC)	Conservatives	57	West
John Scott (JS)	Conservatives	63	South
Murdo Fraser (MF)	Conservatives	54	North
Peter Chapman (PC)	Conservatives	67	North
Alex Rowley (AR)	Labour	53	East
Colin Smyth (CS)	Labour	45	South
David Stewart (DS)	Labour	58	North
Hugh Henry (HH)	Labour	62	West
Iain Gray (IG)	Labour	59	East
James Kelly (JK)	Labour	50	West
Lewis MacDonald (LM)	Labour	58	North
Neil Findlay (NF)	Labour	51	East
Alasdair Allan (AA)	SNP	45	South
Angus MacDonald (AM)	SNP	51	North
Graeme Dey (GD)	SNP	57	North
Ivan McKee (IM)	SNP	56	West
Joe Fitzpatrick (JF)	SNP	52	North
Keith Brown (KB)	SNP	52	East
Kenneth Gibson (KG)	SNP	56	West
Richard Lochhead (RL)	SNP	50	West

3.2 Data preparation and annotation

The orthographic transcription of the speeches was supported by the ASR service Watson Speech to Text (IBM 2022) which performed extremely well on the sample data. The ASR service produced timestamped word level transcriptions for each individual sound file. This output was then merged into utterance-level transcriptions and exported into Praat TextGrid format with the help of a Python script (Weilinghoff 2022). The broad utterance level transcriptions were then manually corrected via ELAN (Max Planck Institute of Psycholinguistics 2022). I subsequently force-aligned the data with the Hidden Markov Model Toolkit (HTK) (Young et al. 2002). This means that the orthographic transcription is first automatically converted into a phonemic transcription and HTK then identifies the beginning and end of each phoneme based on the acoustic transitions from one segment to the next. In other words, the transcriptions are automatically aligned to the acoustic features of the speech events. In the next step, all /r/ tokens in onset position were automatically parsed and identified with the help of *LaBB-CAT* search routines (Fromont and Hay 2012). To minimise the effect of polysyllabic shortening, only monosyllabic and bisyllabic words were selected. I then conducted an auditory analysis on each eligible token (N=2290) and sorted them into two groups (approximants [ɹ] vs. tap/trill realisation [ɾ] [r]) applying the categorisation scheme provided by Meer et al. (2021). In cases of doubt, I also conducted a visual spectrographic analysis in Praat (Boersma and Weenink 2022). All cases of deleted onset /r/ (N=43) were excluded from analysis. A later intraspeaker reliability analysis run on 10 per cent of the overall sample (N=229 tokens) achieved an agreement of 95.16 per cent.

The data was then further annotated for various intralinguistic and extralinguistic predictors. The language-external predictors include the political party (pol) and the regional background (reg) of the speaker. The intralinguistic predictors include the force-aligned word duration (wor) and segment duration (seg), the syllable number (syl), the preceding sound (prec),

the word type (fun) as well as the cluster context (clus) and the phrasal position (phrase). The (cluster context) describes whether the token is positioned in a consonant cluster or not (i.e. *string* vs. *ring*) and the (phrasal position) distinguishes between tokens in final (prepausal) or medial (non-prepausal) position (i.e. *She was right* vs. *This is really lovely*). An overview of the predictors and levels can be found in Table 2.

Table 2: Overview of intralinguistic and extralinguistic predictors and the corresponding abbreviations and levels used for analysis.

Predictors (abbreviations)	Levels
syllable_number (syl)	monosyllabic, bisyllabic
word_duration (wor)	numerical
segment_duration (seg)	numerical
Preceding_sound (prec)	bilabial plosive, alveolar plosive, velar plosive, fricative, vowel
phrase_position (phrase)	final, medial
cluster_context (clus)	yes, no
word_type (fun)	function word, content word
political_party (pol)	Conservative, Labour, SNP
regional_background (reg)	North, East, South, West

3.3 Statistical analysis

The statistical analysis was conducted in R (R Core Team 2022) and implements means of descriptive and inferential statistics. As for inferential statistics, the present study includes conditional inference tree modelling. Conditional inference trees were chosen because they are easier and more straightforward to interpret than mixed models and the interrelations between predictors are more obvious due to the graphical output of the decision trees. The present study implemented the PrInDT (Combining Prediction and Interpretation in Decision Trees) method (Weihs and Buschfeld 2021), which is designed to handle imbalanced response variables. In the present dataset,

the large class (approximants) is three times larger than the small class (taps/trills) (see section 3). In such cases, common conditional inference tree modelling frequently predicts only the larger class of a response variable. The smaller class of the response variable is, however, often ignored. Although the overall accuracy of such models is often very high, the balanced accuracy, which represents the mean of the accuracies of the two classes, is often low. As a result, the predictive power of these models is often very limited: while the large class is explained very well, the smaller class, which usually represents the more interesting non-standard variant, is often not explained at all. PrInDT, however, uses undersampling to increase the predictive power of the models and finds the best balanced accuracy that is still linguistically interpretable. This means that the larger class is stochastically reduced so that the model takes the full sample of the smaller class and the small sample of the larger class for rule construction. This procedure is repeated 1000 times and the resulting trees are then reapplied for the whole dataset to find the best tree that fits both the larger and smaller class (Weihs and Buschfeld 2021: 6–7).

4 Results

Of the 2290 tokens, 1693 are approximants (73.9%) and 597 taps and trills (26.1%), whereby the majority of the latter category represent tap realisations (N=592): only five trills could be identified in the overall sample. The absolute observations for the realisations of onset /r/ separated by the extralinguistic factors can be seen in Table 3.

As for the regional background division, speakers from the South of Scotland have the lowest token number but the highest proportions of taps and trills. Out of the 310 tokens produced by politicians from the South, 99 tokens (31.9%) were realised as approximants. A similar distribution can be found for the Western Central Belt region: 201 tokens (29.9%) were realised as taps/trills out of the total number of 672 tokens. The speakers from the Eastern

Central Belt have a lower proportion with 122 taps and trills (24.2%) out of 504 tokens and the lowest proportion of taps and trills was found for the speakers from the North of Scotland. The dialect region North has the highest token number (N=804) but only 21.8 percent of the tokens (N=175) were pronounced as taps or trills. The proportional range between the dialect region North and South amounts to roughly 10 per cent, which means that the male politicians from the North of Scotland produce roughly 32 per cent less taps and trills than their male colleagues from the South of Scotland.

Table 3: Overview of onset /r/ realisations sorted for the political parties and regional backgrounds of the speakers.

	Token number				Approximants				Taps/Trills			
	Con	Lab	SNP	Σ	Con	Lab	SNP	Σ	Con	Lab	SNP	Σ
East	127	269	108	504	126 (99.2%)	189 (70.3%)	67 (62.0%)	382	1 (0.8%)	80 (29.7%)	41 (38.0%)	122
North	313	152	339	804	270 (86.3%)	134 (88.2%)	225 (66.4%)	629	43 (13.7%)	18 (11.8%)	114 (33.6%)	175
South	128	116	66	310	94 (73.4%)	60 (51.7%)	57 (86.4%)	211	34 (26.6%)	56 (48.3%)	9 (13.6%)	99
West	154	165	353	672	138 (89.6%)	99 (60.0%)	234 (66.3%)	471	16 (10.4%)	66 (40.0%)	119 (33.7%)	201
Σ	722	702	866	2290	628	482	583	1693	94	220	283	597

As for the political party division, the Conservatives produced 628 approximants (86.9%) and 94 taps/trills (13.1%). SNP and Labour speakers, however, show higher proportions of taps/trills overall. All Labour politicians investigated produced 482 approximants (68.7%) and 220 taps/trills (31.3%). The SNP politicians realised 583 approximants (67.3%) and 283 taps/trills (32.7%). This means that the Conservative politicians produce roughly 60 per cent fewer taps or trills than their SNP colleagues. Hence, the distributional differences between the parties are greater than the distributional differences between the regional backgrounds of the speakers.

When comparing the interaction between political party and regional background, one can observe that the Conservatives from the Eastern Central Belt produce almost no taps/trills in onset position (N=1). However, it must be noted that the dataset only includes one Conservative politician from the Eastern Central Belt, namely Gordon Lindhurst (GL). Similarly, Alasdair Allan (AA) is the only SNP politician from the South of Scotland and he produces only 9 taps/trills but 57 approximants. The interactions therefore show that there is considerable interspeaker variation within the parties.

I further plotted the realisations of the individual politicians and grouped them into their parties to analyse interspeaker variation more closely (see Figure 1).

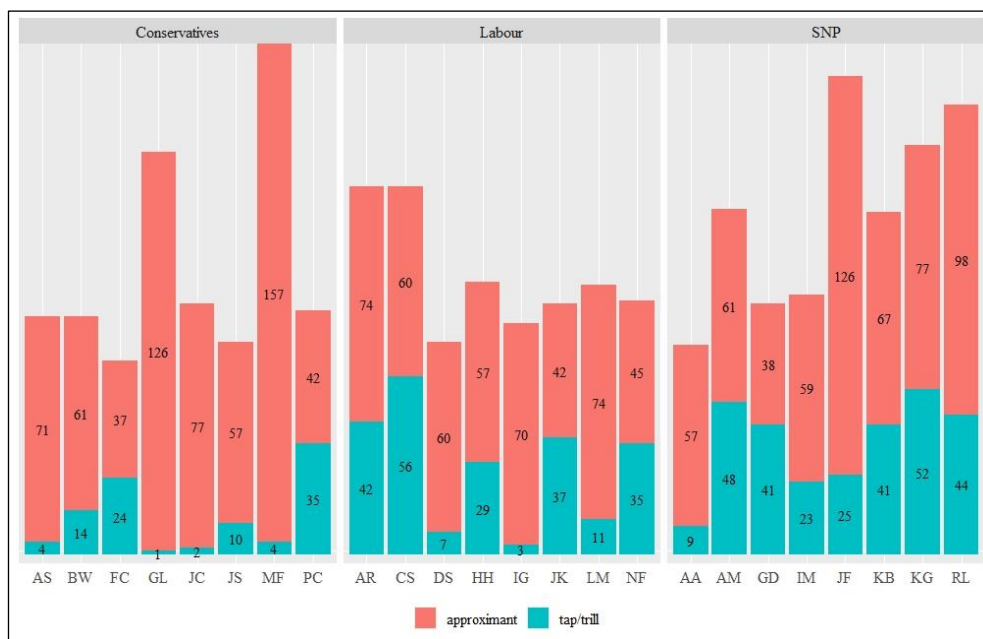


Figure 1: Overview of onset /r/ realisation sorted for the individual speakers and political parties

As for the Conservatives, one can directly see that Gordon Lindhurst (GL) produces very few taps and trills. The same is true for Jackson Carlaw (JC), Alexander Stewart (AS), Murdo Fraser (MF), John Scott (JS) and Brian Whittle (BW). However, the Conservative politicians Peter Chapman (PC) and Finlay Carson (FC) produce comparatively more taps and trills with

percentages of 45 and 39 respectively. As for Labour, there are also three speakers who realise few taps in onset position, namely Iain Gray (IG), David Stewart (DS) and Lewis MacDonald (LM). The other Labour politicians have relatively high ratios of taps and trills. The SNP politicians generally produce many taps, the only exception is Alistair Allan (AA). The SNP politician Graeme Dey (GD) is the only speaker who produces more taps (N=41) than approximants (N=38) in onset position. While there is great interspeaker variation within the parties, it is nonetheless noticeable that the taps and trills are overall less frequent among the Conservatives than among the SNP and Labour politicians. It is, however, unclear whether these group-related differences are significant.

To find out which factors have a significant influence on the production of onset /r/, the present study applied conditional inference tree modelling with the PrInDT function (Weihns and Buschfeld 2021). The best tree had a balanced accuracy of 0.75, which means that the tree can explain 75 per cent of the variation in the dataset. The tree is visualised in Figure 2.

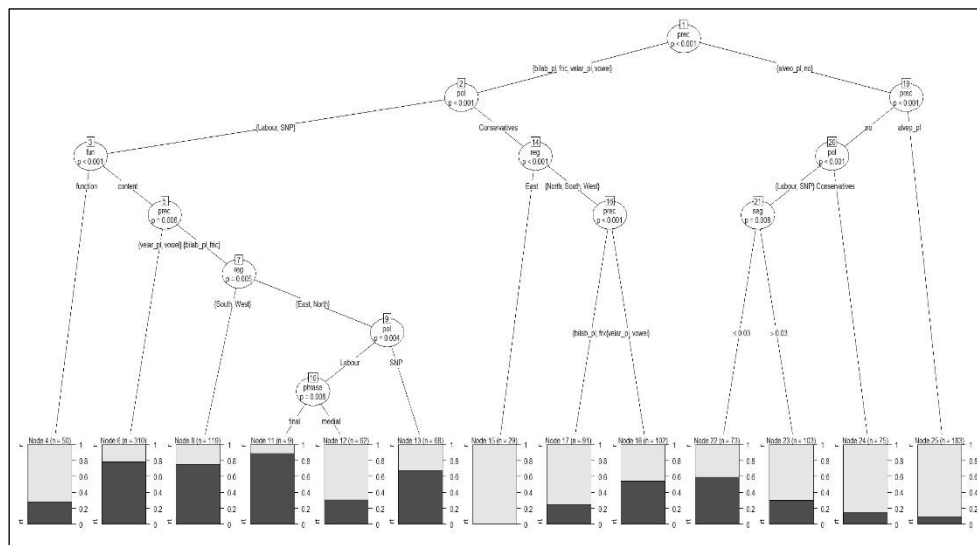


Figure 2: Best tree for onset /r/ realisation with a balanced accuracy of 0.7553

Node 1 splits the data into tokens preceded by alveolar plosives /t, d/ and no preceding sound (single /r/) on the one hand and all other possible contexts on the other. This means that the preceding sound is the most important predictor for the realisation of onset /r/ and that there is a significant difference between /r/ tokens following a syllable boundary or alveolar plosives and all other /r/ tokens.

The tree also shows that the political party of a speaker has an influence on onset /r/ production: Node 2 separates the Conservative politicians from the SNP and Labour MSPs. As for the latter groups, another split separates function words from content words (node 3). This split corresponds to earlier findings as approximant realisations are more frequent in function words (Jauriberry, Sock and Hamm 2015; Schützler 2015: 129). Thus, taps/trills are less often pronounced by Labour and SNP politicians in function words when /r/ is preceded by vowels, fricatives or bilabial and velar plosives. The most frequent function word in this context would be the preposition *from*. Further subdivisions along that branch in content words include the predictors *preceding sound* (node 5), *regional background* (node 7), *political party* (node 9) and *phrase position* (node 10). Node 5 specifies that Labour and SNP politicians frequently realise taps and trills in content words when /r/ is preceded by velar plosives or when it is positioned in an intervocalic position. Node 7 specifies that there is another significant difference between the dialect regions South and West on the one hand as well as East and North on the other. The split in node 9 separates the Labour and SNP politicians and node 10 specifies that onset /r/ is more frequent in phrase-final positions among Labour politicians from the Eastern Central Belt and the North of Scotland. Following the other branch of Node 2, the Conservatives are further subdivided into the different regions East Central on the one side and West Central, North and South on the other (node 14). Thus, in contexts with preceding vowels, fricatives as well as bilabial and velar plosives, the Conservative speakers from the Eastern Central Belt only

produce approximants and no taps or trills. As for the Conservatives from the other regions, there is another split in node 16, which separates preceding bilabial plosives and fricatives from preceding vowels and velar plosives. The same split could also be observed in node 5 highlighting that taps/trills generally occur more frequently when preceded by vowels (intervocalic position) or by velar plosives. Node 19 further subdivides the preceding contexts into alveolar plosives and single /r/ environments. Hence, taps and trills are less frequently realised when preceded by the alveolar plosives /t/ and /d/. As for single /r/ contexts, there is another split that again separates the Conservative MSPs from Labour and SNP politicians (node 20). Thus, Conservative politicians also tend to produce fewer taps and trills in single /r/ contexts. As for the SNP and Labour MSPs, there is another division between single /r/ pronunciations that are longer or shorter than 30 milliseconds (node 21). This implies that taps and trills are more frequent when the corresponding segment duration of /r/ is longer than 30 milliseconds.

5 Discussion

The findings of this study are in line with previous observations. The overall distributions of approximants (73.9%) and taps/trills (26.1%) are comparable to the most recent study which investigated onset /r/ in SSE (Meer et al. 2021). The present investigation could also confirm that trills are very rare in general (Stuart-Smith 2008: 64; Jauriberry, Sock and Hamm 2015; Meer et al. 2021: 130) and that the realisation of onset /r/ is particularly conditioned by the preceding sound (Jauriberry, Sock and Hamm 2015; Meer et al. 2021). Taps/trills are less frequently pronounced in content words and when followed by alveolar plosives and in single /r/ contexts (Meer et al. 2021: 125; Schützler 2015: 174). The Scottish variants are, however, relatively frequent when preceded by velar plosives and vowels (intervocalic position) (Meer et al. 2021: 125; Jauriberry, Sock and Hamm 2015; Schützler 2015: 172). The present study could also find an influence of phrase position (node 10) and

segment duration (node 21). Yet, the finding on segment duration has to be taken with caution as rhotic sounds are generally difficult to segment in terms of their duration (Turk, Nakai and Sugahara 2006: 14). Overall, the results demonstrate that especially the preceding sound has a significant influence on the realisation of onset /r/. Other important intralinguistic factors are the phrase position and the word type (content word vs. function word). As the preceding sound is in the first node of the tree (see Figure 2), this means that it has a stronger influence on onset /r/ production than the other factors. Intralinguistic factors do therefore have a stronger impact on onset /r/ than extralinguistic factors, which is also in line with previous findings (Jauriberry, Sock and Hamm 2015).

As for the extralinguistic factors, the findings show that party membership has an influence on the realisation of onset /r/. Especially the Conservative politicians pronounce significantly fewer taps/trills than SNP or Labour MSPs. However, the party-based differences in onset /r/ production do not follow the stance on Scottish independence: the pro-independence SNP politicians realise more taps/trills than the unionist Conservative MSPs, but there is not a significant difference between the SNP and the unionist Labour politicians. Rather, social class might be an important driving force. While all politicians investigated are of comparable age and have the same gender, while they were all born and raised in Scotland and received their education there, it is difficult to classify the social class background of the politicians as there is often not enough information. Nevertheless, the political parties themselves represent social class in different ways: whereas the Labour Party is traditionally associated with the working classes and the SNP pursues social democratic policies today, the Conservative vote traditionally relies on the middle and upper classes (Cole and Deighan 2012: 102 ff.). Likewise, also the members and politicians of the parties usually derive from different social backgrounds: whereas Labour and SNP politicians often have a working-class background, Conservatives are often middle or upper class. The party-related

differences in onset /r/ production could therefore reflect the social composition of the parties – however, the social composition at the same time also defines the parties themselves. Another possible influence might be the secondary educational background of the speakers: five of the speakers (Alexander Stewart, Gordon Lindhurst, Jackson Carlaw, John Scott and Iain Gray) went to fee-paying public schools and all of them produce relatively few taps/trills in onset position (see Figure 1). Four of the five privately educated politicians are also Conservatives. Nevertheless, there are also many non-privately educated politicians who produce few taps and trills. While there is also interspeaker variation within the parties and although the reasons for the party-related differences between Labour and the SNP on the one hand and the Conservatives on the other hand are open for debate, the results of this study nevertheless show that there is a significant difference between the two groups in onset /r/ production. Hence, the findings provide evidence that phonetic variation can index political party affiliation (Hall-Lew, Friskney and Scobbie 2017). Moreover, the present analysis also found that even a superficially homogeneous speaker sample can display great interspeaker variation (Hall-Lew, Friskney and Scobbie 2017: 358).

6 Conclusion

The present study has investigated the realisation of onset /r/ among 24 Scottish politicians from the three biggest parties (Conservatives, Labour, SNP). Applying the PrInDT method, the analysis has demonstrated that political affiliation has an influence on onset /r/ realisation. Conservative politicians pronounce significantly fewer taps/trills than SNP and Labour MSPs. Further influential predictors include the preceding sound, the word type, the phrase position and the regional background of speakers. Due to the controlled dataset and the high balanced accuracy of the model, I conclude that phonetic variation in the realisation of onset /r/ can index political affiliation among Scottish politicians.

As the analysis has shown that even a superficially homogeneous speaker sample can display great interspeaker variation, future studies with an improved dataset may offer further insights. Future studies would especially benefit from a larger and more diverse sample. It would be very interesting to see whether the party-related differences found in this study are also stable across different genders and age groups. Another study could investigate other phonetic features to provide a clearer picture of the relationship between politics and pronunciation in Scotland. Especially the distribution and realisation of coda /r/ would be a critical feature to analyse in this context. Ideally, future studies should include several phoneticians so that also interrater reliability can be assessed in the analyses. In addition, future investigations could further benefit from taking the precise educational background of speakers (i.e., privately educated or not) into consideration.

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