# THE SOCIOLINGUISTICS OF /R/-LIAISON IN ENGLISH: AN EMPIRICAL STUDY 

PILAR MOMPEÁN GUILLAMÓN<br>Universidad de Murcia


#### Abstract

This paper is intended to provide empirical evidence on the relationship between gender and a particular phonological feature of non-rhotic English called/r/-liaison, which includes the phenomenon of linking $/ r /$ and that of the stigmatised intrusive $/ r /$. Two hypotheses were investigated using BBC news archives from the years 2004-2005 read by over a hundred BBC newsreaders amounting to more than 40000 words were analysed: a) that the rate of usage of linking $/ r /$ would be the same for both men and women; and b) that, given its stigmatisation, women would tend to avoid the use of intrusive $/ r$ / more than men do. The results obtained confirm the first hypothesis, that men and women make equal use of linking $/ r /$; though not the second, that women would produce fewer intrusive $/ r$ /'s than men. ${ }^{\text {I }}$

KEYWORDS: intrusive /r/, linking /r/, sociolinguistics, stigmatisation.


#### Abstract

RESUMEN. Este articulo pretende aportar evidencia empírica a la relación establecida entre los estudios sociolingüísticos que versan sobre las diferencias de género y un aspecto fonológico del inglés no rótico llamado /r/-liaison, que incluye los fenómenos de linking /r/ y de la estigmatizada intrusive $/ r$ /. Haciendo uso de archivos de noticias leidas por más de un centenar de reporteros de la BBC durante los años 2004 y 2005, se investigaron dos hipótesis: a) que el porcentaje de uso de linking $\mathrm{r} / \mathrm{l}$ sería el mismo para hombres y mujeres; y b) que, dada su estigmatización, las mujeres tenderían a evitar el uso de intrusive /r/ en mayor medida que los hombres. Dichos archivos conforman un corpus de más de 40000 palabras. Los resultados obtenidos confirman la primera hipótesis, que tanto hombres como mujeres producirán linking /r/ en igual medida; pero no la segunda, que las mujeres producirían intrusive $/ r /$ en menor proporción que los hombres.


Palabras clave: intrusive $/ r /$, linking $/ r /$, sociolingüística, estigmatización.

## 1. Introduction

The differences between men and women and the use both make of language has been the focus of much attention among linguists and sociologists. Especially from 1970's onwards, many studies have been published on the relationship between gender and language variation and change. Such studies have dealt with gender differences in terms of syntax and morphology (e.g. Li \& Tse 2002), vocabulary (e.g. Boyle 1987; Lakoff 1975; Rich 1977; Woodworthand \& Wells 1911), discourse analysis (Coates 1993; Shapiro \& Anderson 1985), or phonetics (e.g. Labov 1972; Milroy et al. 1994; Trudgill 1972 \& 1974).

One important fact to bear in mind is that even if studies on gender differ from one another within the point of view the phenomenon is investigated from, most of them lead us to the same conclusion: women make more use of standard prestige forms than men (Coates 1993: 184; Labov 1990: 210-215).

Several arguments have been provided to support such a claim. The general idea is that women seem to be more sensitive to status-giving prestige norms, while men are more sensitive to vernacular norms, which represent solidarity and masculinity.

Some authors such as Deuchar (1988) and Fasold (1990) state that women's higher use of standard forms can be seen as a strategy for maintaining face in situations where women are powerless or in an inferior social position to men. Other scholars such as Gordon (1997) argue that women may be reluctant to use non-standard forms so as to avoid being associated with the social stereotype of promiscuity. Trudgill (1972) has commented on the fact that women are more likely to indicate their social status by means of the use of the overtly
prestigious variants, against the roughness of non-prestige forms, associated both with working-class life and masculinity.

All these ideas point towards the need for more empirical studies on the issue of stigmatised forms of English in relation to the variable gender. One of such stigmatised features of English is the phonological phenomenon intrusive /r/ in non-rhotic English grouped together with the phenomenon of linking $/ \mathrm{r} /$ under the label of $/ \mathrm{r} /$-liaison - . In this kind of English, as is well known, an r-sound for the letter $\langle\mathrm{r}\rangle$ is pronounced only when the latter is followed by a vowel sound - a phenomenon known as linking $/ \mathrm{r} /-$. Accordingly, $/ \mathrm{r} /$ is not found in words pronounced in isolation like tear /trə/, tears /tiəz/, or tearless /'trələs/ since $<\mathrm{r}\rangle$ is followed by a pause (tear) or consonant sound (tears, tearless). On the contrary, an r -sound is pronounced when the $\langle\mathrm{r}\rangle$ is followed by a vowel sound across word boundaries (e.g. tear it /'tear it/) or in word-internal position (e.g. tearing /'teərın/). A related phenomenon in non-rhotic accents of English is that of intrusive $/ \mathrm{r} /$, i.e. an epenthetic r-sound in intervocalic positions where historically there was no $/ \mathrm{r} /$ in the pronunciation of the word and present-day spelling does not contain an $<\mathrm{r}>$ (e.g. I saw it /ai sכ:r rt/).

Since intrusive $/ \mathrm{r} /$ in non-rhotic accents is not justified by the spelling, this unetymological $/ \mathrm{r} /$ has traditionally been regarded as a vulgarism by many speakers and its use -but not that of linking /r/-, is typically stigmatised (Crystal 1984: 36; Jones 1956: 114; Knowles 1987: 134; Wells 1982: 224). However, despite their different degree of prestige as well as historical linguistic and orthographic differences, linking /r/ and intrusive /r/ are essentially the same phenomenon (e.g. Wells \& Colson 1971: 95): both linking /r/ and intrusive $/ \mathrm{r} /$ are found word-internally or across word boundaries, and only after certain nonhigh vowels, namely /a:/, /ว:/ or the final central vowels /ə, з:, гә, еә, шә/ (Collins \& Mees 2003: 105; Lewis 1975: 37; Wells 1982: 226; Wells \& Colson 1971: 94).

## 2. The SOCIOLINGUISTIC PERSPECTIVE OF/R/-LIAISON: AN EMPIRICAL STUDY

Different studies have been conducted to investigate the factors that might influence the variability of $/ \mathrm{r} /$-liaison usage. These studies have made it clear that although $/ \mathrm{r} /$-liaison is very common in non-rhotic accents, its use is by no means universal or categorical in these accents. Variability in the use of $/ \mathrm{r} /$-liaison has been documented for Tyneside (Watt \& Milroy 1999), New Zealand English (Hay \& Warren 2002) or RP (e.g. Bauer 1984; Gimson 1980: 208; Jones 1956: 115; Lewis 1975: 39; Wells 1982: 284).

Different types of factors (cognitive, linguistic, phonetic, sociolingustic, etc.) seem to influence variability in the use of $/ \mathrm{r} /$-liaison (see e.g. Hay \& Sudbury 2005, for a review). Sociolinguistic factors in relation to /r/-liaison have to do with age, gender, social status, etc., i.e. variables typically studied by traditional sociolinguistic research, but unfortunately not empirically investigated so far in relation to this particular phonological phenomenon. The aim of the present paper is to provide empirical evidence in order to gain a better understanding of the sociolinguistics of $/ \mathrm{r} /$-liaison in English. More specifically, the two research questions investigated in this paper are: a) is the use of linking/r/ in English as frequent in male as in female speakers?; and b) given its stigmatization, is avoidance of $/ \mathrm{r} /-$ liaison more common in female than in male speakers of English?

Based on the general ideas found in the literature about the relation between gender and language variation and change, as shown in the Introduction, the two hypotheses entertained in this paper are: a) the rate of usage of linking $/ \mathrm{r} /$ will be the same for both men and women; b) given its stigmatization, women will produce intrusive $/ \mathrm{r} /$ less than men.

### 2.1. Method

### 2.1.1. Data

307 texts from the news archives of the BBC World Service website (see URL1) were used in order to check the hypothesis entertained in this study. This resource was chosen because most newsreaders are RP speakers so the archives provide a large amount of data on this accent. For this study, only the news archives corresponding to the years 2004 and 2005 were investigated.

The criteria for a given text to be analysed were: a) that the text should be read by an RP speaker; b) that the name of the newsreader, even in the case of RP speakers, should be identified; c) that the text should be available as an audio file at the time the study was conducted; d) that the text should be read by a professional newsreader.

These requirements ruled out 44 texts. Thus, out of the 307 texts of the 2004-2005 news archives, only 263 were analysed. This represents $86 \%$ of the entire 2004-2005 corpus. According to the author's analysis, the whole corpus contained 49,082 words (around 4 hours, 20 minutes and 57 seconds).

### 2.1.2. Speakers

The texts from the 2004-2005 archives were produced by at least 152 BBC newsreaders, a relatively homogeneous group as far as social class - defined as the speakers' professional activity - is concerned.

In addition, each newsreader was identified as an RP/non-RP speaker based on a number of features like presence or absence of rhoticity and typical segmental inventories described for the accent. As far as the RP speakers are concerned, most of them can be defined as Mainstream RP (Wells 1982) or General RP (Gimson 1980) speakers. There are presumably cases of Adoptive RP (Wells 1982) and speakers with more conservative pronunciations. However, no distinction is made in this paper between subtypes of RP in relation to the occurrence of $/ \mathrm{r} /$-liaison in this accent.

The identity of 130 RP speakers out of a potential figure of 132 was verified. The figures also reveal a disproportion in the gender groups since female RP speakers are less numerous than male ones ( $29 \%$ vs. $71 \%$ respectively) - a disproportion that is not altered even if identified non-RP speakers are also taken into account ( $32 \%$ vs. $68 \%$ ) -. It should also be noted that the number of texts analysed (i.e. 263) is not the same as the number of RP newsreaders (males and females combined), i.e. 130. The reason is that some newsreaders broadcast more than one text (see Table 1).

|  | Females |  | Males |  | Females \& Males |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Identified | Unidentified | Identified | Unidentified | Identified | Unidentified |
| RP speakers | 38 | 1 | 92 | 1 | 130 | 2 |
| Non-RP speakers | 10 | 0 | 12 | 0 | 22 | 0 |

Table 1. Number of identified and unidentified female and male speakers ( $R P$ and non-RP) in the BBC World Service 2004-2005 news archives.

### 2.1.3. Procedure

For each text, its written version was copied and pasted into a Word document where the potential $/ \mathrm{r} /$-liaison contexts were identified. The identification process involved reading the texts for potential environments and marking them.

Searches were carried out to minimise the possibility of overlooking or missing any potential contexts. In the case of linking $/ \mathrm{r} /$, the combinations $<\mathrm{r}>$ and $<\mathrm{re}>$ were checked with a space after them, which leads to word boundaries, or with a punctuation mark after $<r>o<r e>(e . g . r, r . r: r ; r-r-r ? r!r " r) r] r * r \prime r>r \#)$.

Regarding intrusive /r/, both word-internal and word-boundary contexts were considered. In the case of word-internal positions, combinations of the letter $<a>$ plus another vowel letter were searched for (e.g. <ai>, as in concertinaing) as well as the digraph <aw> followed by another vowel letter (e.g. <awa>, as in withdrawal; <awi>, as in drawing; <awe>, as in awe-inspiring) or <y> (e.g. strawy).

Across word-boundaries, the combinations $<\mathrm{a}>$ and $<$ aw $>$ were checked with a space after them or the same letters followed by a punctuation mark (i.e. a, a. a: a; a-a-a? a! a" a) a] a* a' a> a\#). In addition, words ending in orthographic <ah>, <eh>, and <agh> were searched for, since many words of non-Saxon origin are often spelled in this way (e.g. Abdullah, Rafah, Omagh, Nineveh, etc.) as well as a few words like yeah. Other marginal spellings were also inspected like <oi>, as in moi, <ois> as in bourgeois, <ieu> as in milieu, <as> as in Degas or <urgh> as in Oxburgh.

Next, texts were analysed auditorily for the occurrence/non-occurrence of intrusive /r/ in the potential contexts identified.

### 2.2. Results and discussion

The results obtained are summarised in Table 2. Figure 1 also shows the percentages of /r/-liaison usage by both male and female speakers.

As far as the first research question is concerned, the results obtained seem to confirm our hypothesis that the rate of linking $/ \mathrm{r} / \mathrm{s}$ would be the same for both men and women. Out of 216 potential cases in the females' data, 120 linking /r/'s were produced. In the males’ data, out of 768 potential cases, 450 linking $/ \mathrm{r} /$ 's were found. These figures represent, respectively, $55.5 \%$ and $59 \%$ of all potential cases in each group. Even if there seems to be a slight difference between the percentages, a chi-square test shows that this difference is not statistically significant $(\mathrm{X} 2(1)=0.876, \mathrm{p}=0.349>0.05)$. This could be due to the fact that, as stated in the Introduction, the phonological phenomenon linking $/ \mathrm{r} /$ is not perceived as stigmatised by speakers and they simply produce it in a natural way. It must, however, be pointed out that for both genders linking /r/ occurs at a rate possibly lower (i.e. 59\%) than would have been expected in colloquial speech, which seems to be a feature of scripted broadcast speech. This lower incidence of linking /r/could be explained as a result of the tendency to avoid intrusive $/ \mathrm{r} /$ from their speech at the expense of eliminating linking $/ \mathrm{r} / \mathrm{s}$ too (Wells \& Colson 1971: 95).

Concerning the second research question, the analysis of the data reveals that out of 29 potential cases of intrusive $/ \mathrm{r} /$, females produced only 7 whereas men produced 45 out of 136 potential cases. The percentage of intrusive $/ \mathrm{r} /$ 's in each group is, respectively, $24 \%$ and $33 \%$. This could initially be thought as confirming the hypothesis that women would produce fewer intrusive $/ \mathrm{r}$ /'s than men, however chi-square tests show that the differences between men and women are not statistically significant $(\mathrm{X} 2(1)=0.532, \mathrm{p}=0.466>0.05)$. This means that, although intrusive/r/ usage is more common in men in the corpus analysed, this difference may just have been due to chance and it is not possible to say that there are great gender differences between the groups in general.

Three explanations seem to be readily at hand for the observed patterns. On the one hand, due to the fact that the phenomenon is equally stigmatised for both groups, it should, in principle, be less used by women. However, taking into account the results obtained, perhaps men are more conscious of the stigmatised quality of the phenomenon and, conditioned by
the stylistic context they find themselves in (i.e. newsreading), make more efforts to avoid it with the result that the differences between the occurrences of $/ \mathrm{r} /$-liaison are not statistically significant. On the other hand, it could be argued that once females have access to a labour market traditionally monopolised by men, the former also tend to imitate men in different ways, including speech habits. If this applies to $/ \mathrm{r} /$-liaison, it would mean that women tend to use intrusive /r/ as often as men due to imitation of male speech habits. That is, even if the phenomenon is equally stigmatised for both men and women, the latter might make fewer efforts than men at present to avoid intrusive /r/ once they are professionally at the same level. (Coates 1993: 10).

Another potential interpretation is that intrusive $/ \mathrm{r} /$ is losing its stigma in the minds of the general population, i.e. that a change has taken place in what people perceive as good speech in a newsreading context.

|  | Linking/r/ |  |  | Intrusive /r/ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Potential cases | Linking /r/s | Percentage of linking /r/s | Potential cases | Intrusive /r/s | Percentage of intrusive /r/s |
| Females | 216 | 120 | 55.5 | 29 | 7 | 24 |
| Males | 768 | 450 | 59 | 136 | 45 | 33 |
| Females \& males | 984 | 570 | 58 | 165 | 52 | 31.5 |

Table 2. Number of potential /r/-liaison contexts, actual instances and percentages of use: females, males, and both groups combined.


Figure 1. Difference between males and females in the pronunciation of intrusive and linking $/ r /$

## 3. CONCLUSION

The present paper has aimed to provide more empirical evidence on $/ \mathrm{r}$-liaison usage in RP. More specifically, the variable gender as one of the factors that influence variability in intrusive /r/ usage has been investigated.

The first hypothesis analysed in this paper, that men and women would make equal use of linking $/ \mathrm{r}$, has been confirmed.

Nevertheless, and contrary to what the general literature seems to suggest, this study makes clear is that there are not such big differences between men and women at the time of making use of a stigmatised phenomenon as intrusive $/ \mathrm{r} /$ is. This may be a consequence of the situation of both sexes in present-day society. It could be argued that it is precisely because of the new role women are taking in society that they have decided to acquire those ways of speaking in order to sound much more integrated in the world outside their homes. It is precisely because women seem to be more sensitive to status-giving prestige norms, that they are more concerned about when and what they should use them for.

This study has several inherent limitations that must be pointed out. Firstly, the corpus analysed did not allow to look at potential differences in the occurrence of $/ \mathrm{r}$ /-liaison due to stylistic variation. According to Brown (1988: 145), there is "clearly stylistic variation in the phenomenon; use of linking/intrusive /r/ is a feature of fluent colloquial style, and is not so common in careful declarative style". It could be thought that gender differences in $/ \mathrm{r} /$-liaison usage would be greater if other stylistic contexts had been taken into account (e.g. men would do less effort to avoid $/ \mathrm{r} /$-liaison usage in non-scripted discourse). Therefore, further research with non-scripted speech is needed. A further limitation of the present study is that diachronic change could not be investigated since the year of birth of the speakers is not known. To investigate the influence of the age factor in /r/-liaison usage, preliminary inspections of BBC newscasts from the years 1950' to 1970 's, also available at the BBC website (see URL2), are being carried out. This analysis may provide data regarding changes in the use of $/ \mathrm{r} /$-liaison by different generations of broadcasters.

## Notes

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