

1% in Style C to a high of 16% in Style A; i. e., some of our speakers drop final /r/ in their most informal conversational style. The greater percentage of variant [Ø] in Style B than in Style A is probably not a significant difference in our study. We suggest that further research on (R#), so as to differentiate between monomorphemic final /r/ and infinitive marker final /r/, might show a difference to exist which would clarify this ambiguity in the structure of (R#).

In summing up, we may say that the crucial factor in the stylistic variation of (RL) in PRS is the difference in media, i. e., reading vs. speaking. Speakers are most apt to pronounce the standard flap /r/ in a formal reading situation. In all conversational styles, this variant remains at a stable frequency of about 30%, whereas the [l] pronunciation is the most common, with some frequency of /r/ assimilating to the following consonant in classes of words with the phonological shape of CVRCV.

PRS Variable (S). This is one of the most important and complex phonological variables in PRS and we will dwell at length on its many aspects. It has three possible values or phonetic realizations, as follows:

<u>Code</u>	<u>Phonetic variant</u>	<u>Description</u>
S-1	[s]	a dento-aveolar fricative; the standard variant
S-2	[h]	a glottal fricative with slight friction, known in the literature on Spanish dialectology as 'aspirated s'
S-0	[Ø]	phonetic zero, i. e., morphophonemic /s/ is deleted

Regarding the social significance of the variation of morphophonemic /s/ in Puerto Rico, Navarro-Tomás has said: 'Educated people who aspirate s in ordinary conversation pronounce it with its proper sound in lectures and academic circles ... The suppression of final s, widespread throughout the Island, is heard even in the casual speech of educated people, although this does not imply that the awareness for the lost s is decreasing.' (73) Rosario too has noted that 'aspiration and loss of s is normal in Puerto Rico, in informal conversation but many people still tend to replace their s's in school, in recitation, and in public speaking. This change has not taken place fully among members of the educated class.' (15)

The following display in Table 2 shows the eight different morphophonemic environments for (S), with examples given in conventional orthography. As in English, the Spanish plural marker is realized morphophonemically as /s/. In cases where the realization is S-0 or phonetic [Ø], singular and plural forms become homophonous. Likewise, in certain verb forms, e. g., haces/hace, the 2nd and 3rd person present tense forms are also indistinguishable.

TABLE 2. (S) SUBVARIABLES IN PRS

<u>Subvariable</u>	<u>Example</u>	<u>Morphophonemic environment</u>
(SC)	esc <u>u</u> ela hasta <u>a</u>	word-medial <u>s</u> where the following syllable begins with a consonant
(S#)	arroz <u>z</u> luz <u>z</u>	final <u>s</u> which is part of the word or morpheme; may be in isolation
(Sp1#V)	los hombres <u>s</u> hablan <u>s</u> los nenes <u>s</u> oyen	final <u>s</u> which marks the plural inflection for nouns, followed by a vowel-initial word
(Sp1#C)	los hombres <u>s</u> comen <u>s</u> los nenes <u>s</u> juegan	final <u>s</u> which marks the plural inflection for nouns, followed by a consonant-initial word or final #
(Sa#V)	los <u>s</u> hombres muchos <u>s</u> hombres	final <u>s</u> which marks the plural inflection for preceding articles and adjectives, followed by a vowel-initial word
(Sa#C)	las <u>s</u> clases muchas <u>s</u> clases	final <u>s</u> which marks the plural inflection for preceding articles and adjectives, followed by a consonant-initial word or final #
(Sv#V)	tu vas <u>s</u> al cine es <u>s</u> un amigo	final <u>s</u> which marks the 2nd person verbal inflection or the copula, followed by a vowel-initial word
(Sc#C)	tu vas <u>s</u> para allá es <u>s</u> correcto	final <u>s</u> which marks the 2nd person verbal inflection or the copula, followed by a consonant-initial word or final #

The following distribution chart, Table 3, shows the stylistic structure of variable (S) for all subvariables.

It is sociolinguistically significant that the standard variant S-1 has the highest occurrence in the most formal style, D, and the least occurrence in the most informal style, A, with the decline through intermediate styles marked by distinct steps or levels. For all subvariables of (S) except one, S-1 always has this regular pattern. The pattern of S-2 distribution is equally regular. By plotting graphs of the subvariables (SC) and (S#) in Figures 5 and 6, we can see how very systematic the relationship between all (S) values are.

For both subvariables, the relative frequency of value S-1 (dotted line) can be seen to decline along the axis of increasing stylistic informality. In both subvariables, the steepest decline of the standard value occurs at the juncture between reading and speaking styles. (As seen in the discussion of variable (RL), this further justifies our having placed Style WN between C and B along the style continuum.) Moreover, even within each medium, e. g., between D and C and between WN and B or B and A, values S-1 and S-2 maintain their relative proportions, showing a highly structured relationship. Even with value S-0 (which is again more frequent in (S#) as it was in (R#), suggesting that word-final position seems to be a more favorable environment for the realization of zero variants in general), the overall distribution is one of increasing frequency with increasing informality of style.

Before looking more closely at the individual subvariables of (S), we might ask ourselves whether the community-wide pattern noted in Table 3 can also be found as well on the level of the individual speaker. Table 4 shows that the relative frequency distributions for two female informants are the same across styles, even though individual frequency scores within styles are higher for one speaker than for the other.

The first informant, No. 125, is an older working mother born in a provincial highland town in contrast to informant No. 150, who is younger and was born in an urban coastal city. The first informant is more of an /s/-pronouncer. Yet both exhibit the same pattern of progressive decline in the standard variant with increase in informality which we found for the overall community. In subvariable (SC), value S-1 completely dominates reading styles for both informants, in contrast to their conversational styles, where value S-2 is the most frequent value. Informant 125 never drops her /s/ in words like mismo, estudiante, etc., and in the word-final /s/ class of words, she drops it only in the most casual style. Obviously, informant 150 is more of an [h]-pronouncer even in the more formal reading Style C and she also deletes /s/, i. e., has more value S-0, to a greater extent in the conversational styles B and A. However, she does compare favorably to informant 125 with respect to S-1, but only at lower level of frequency.

We now take a closer look at all the word-final subvariables of (S), which play the most complex part in understanding the structure of this variable. It should be noted that the last six subvariables (see Table 2) are in fact three sets of paired subvariables, since they differ only according to whether the following word begins with a vowel or a consonant. Yet they must be distinguished as sets because each grammatical category with which final /s/ is

TABLE 3. STYLISTIC DISTRIBUTION OF (S) IN PRS

Sub- variable	Number of Occurrences	Code	Percentage Style				
			<u>D</u>	<u>C</u>	<u>WN</u>	<u>B</u>	<u>A</u>
(SC)	1994	S-1	90	84	31	14	7
		S-2	8	15	67	79	81
		S-0	1	1	2	7	11
(S#)	993	S-1	82	78	40	20	12
		S-2	4	9	27	47	58
		S-0	12	13	33	33	30
(Spl# V)	338	S-1	--	90	--	15	9
		S-2	--	8	--	38	39
		S-0	--	22	--	47	52
(Spl# C)	1169	S-1	--	74	60	2	4
		S-2	--	9	17	38	34
		S-0	--	17	23	60	62
(Sa# V)	112	S-1	--	81	--	61	73
		S-2	--	12	--	22	17
		S-0	--	6	--	17	10
(Sa# C)	512	S-1	--	65	15	6	7
		S-2	--	27	78	69	70
		S-0	--	7	7	25	23
(Sv# V)	131	S-1	--	--	--	7	9
		S-2	--	--	--	71	62
		S-0	--	--	--	22	29
(Sv# C)	308	S-1	--	--	--	9	7
		S-2	--	--	--	58	57
		S-0	--	--	--	33	36

NOTE: A dash means insufficient data available on a particular style.

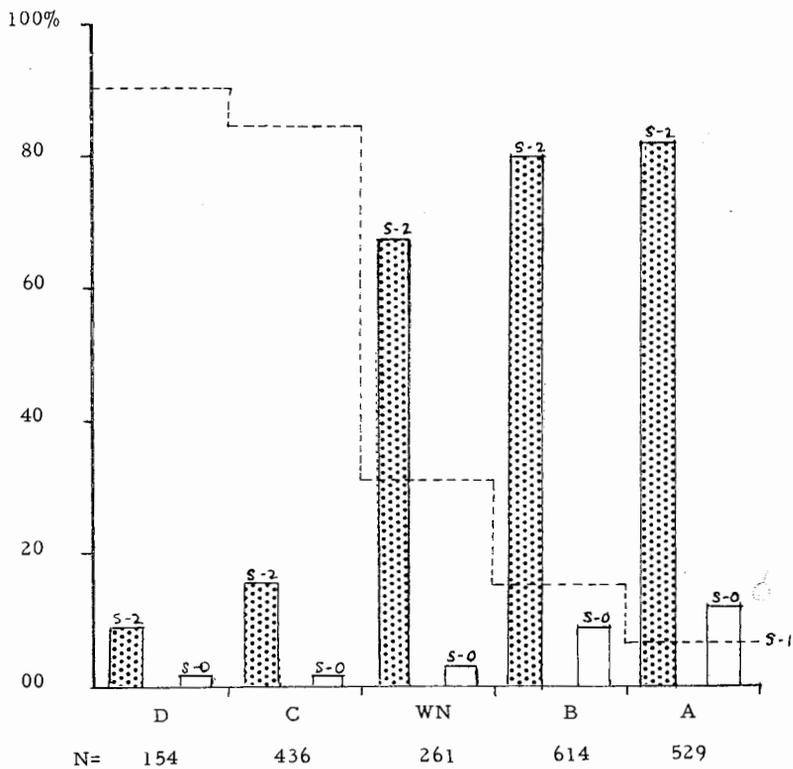


Fig. 5. Stylistic Variation of (SC) in PRS
(Total N=1994)

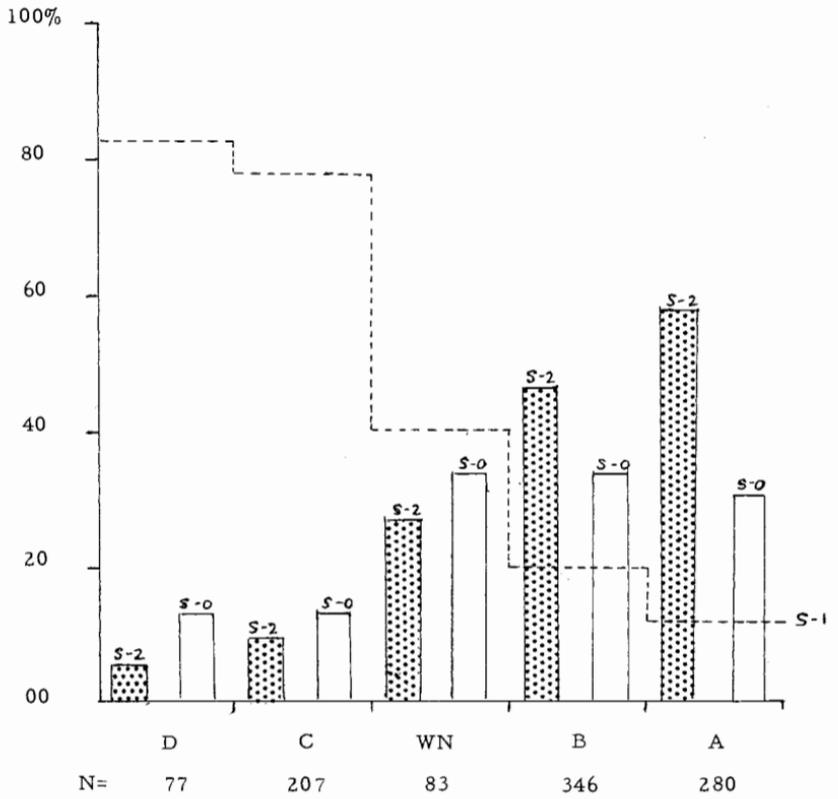


Fig. 6. Stylistic Variation of (S#) in PRS
(Total N=993)

TABLE 4. (SC) AND (S#) RELATIVE FREQUENCY ARRAYS FOR TWO INFORMANTS

		Percentage Informant 125					Percentage Informant 150				
	<u>Code</u>	<u>D</u>	<u>C</u>	<u>WN</u>	<u>B</u>	<u>A</u>	<u>D</u>	<u>C</u>	<u>WN</u>	<u>B</u>	<u>A</u>
(SC)	S-1	100	100	78	47	0	100	100	0	7	4
	S-2	0	0	22	53	100	0	0	100	68	72
	S-0	0	0	0	0	0	0	0	0	25	22
	N=	4	14	9	13	10	4	12	13	16	27
(S#)	S-1	100	100	---	80	25	100	50	50	8	0
	S-2	0	0	---	20	38	0	50	50	36	67
	S-0	0	0	---	0	37	0	0	0	45	33
	N=	2	5	---	10	10	2	4	2	11	6

associated constitutes a separate conditioning factor in the realization of (S). As noted before, final /s/ in Spanish marks the plural inflection for various constituents or grammatical classes belonging to the noun phrase. One of the standard grammatical rules in Spanish is the concord rule, which states that agreement in gender and number holds between the head noun, the determiner, and the attributive adjective. All determiners (which include possessives and demonstratives, whether singular or plural), always precede the noun; the attributive adjective may or may not. In the case where it does, then it behaves phonologically very much like the determiner. In analyzing the behavior of variable (S), we have had to isolate the two major grammatical classes affecting the realization of the plural marker /s/, i. e., plural nouns from plural determiners or adjectives. Subvariables (Sp1) deal with the first class, plural nouns, and subvariables (Sa) deal with the determiners and adjectives. Thus, examples of the noun phrases we are interested in are as follows:

1. los libros
(Sa) (Sp1)
2. muchos libros
(Sa) (Sp1)

In noting the disappearance of final plural markers, Rosario has said: 'In many words, particularly in the plurals of nouns and adjectives, there is no sound [i. e., no final /s/] ... except in the memory of the speaker or when the speaker becomes emphatic' (15). In the case of a noun phrase like

3. los tres libros
(Sa) (S#) (Sp1)

note that the final /s/ on tres is monomorphemic and is therefore counted under the (S#) subvariable.

We can now refer back to Table 3 to look at the percentage scores for these two sets of subvariables together, since they are so closely related in their phonetic realizations. Taking the phonological conditioning factors first, we note immediately that (Sa#V) is the only subvariable where the standard value S-1 prevails against the stylistic shift and maintains a rather consistently high level of frequency, 81%, 61%, and 73% in styles C, B, and A, respectively. That it should be so high for Styles B and A might appear to be surprising, since we had previously noted that S-1 generally had a very low level of occurrence in these styles. The reversal here in (Sa#V) can be explained by the fact that the environment of vowel-initial words preceded by final /s/ is a favorable phonetic environment for the retention of that /s/, particularly in its standard [s] realization.⁶ Despite the relatively small N observed here, this interpretation is supported by a comparison with (Sa#C), where many more observations of the same grammatical class were made. In (Sa#C), we do see the characteristic lack of the standard value for Styles B and A, which conforms to the overall pattern for (S). Thus the presence

of a following vowel vs. a following consonant does play a decisive factor in the behavior of (Sa) subvariables.

Since phonological environment has been shown to override other conditioning factors in (Sa) subvariables, we might expect that the other subvariables with the environment of following vowel might show a similarly high amount of S-1. Our table does not bear out this expectation. (Spl#V) and (Sv#V) in conversational styles have a very low frequency of S-1. We assert that this is due to the fact that grammatical factors, and not phonological factors, are operating here. Of the three possible variants available in (Spl#V), where /s/ marks the nominal plural, value S-0 seems to dominate, 47% and 52% in both these styles. Looking at (Sv#V), where /s/ marks the verbal inflection, value S-2 seems to be the predominant value, with highs of 71% and 62% for these styles. Although all three subvariables (Sa#V), (Spl#V) and (Sv#V) share an identical phonological environment, their radically differential phonetic realizations in styles B and A force us to conclude that the grammatical environments of final /s/ have as great an effect as any other factors on PRS speakers' behavior regarding variable (S) along the axis of stylistic variation.

Another example from our data also points to the importance of grammatical environment as a defining variable for the realization of (S). We note that both noun plural subvariables (Spl#V) and Spl#C) show the highest amount of value S-0 as the norm of pronunciation in Styles B and A. In these, S-0 occurs with a range from 47% to 62%, a relatively high frequency range. This shows that the plural marker on nouns is most often dropped or deleted, i. e., /s/ _{pl} ---> [Ø] is a phonological rule in PRS for conversational styles. By contrast, we see that the subvariables (Sa#V) and (Sa#C) show value S-1 (a range of 61% to 73%) and value S-2 (a range of 69% to 70%) as the highest values, respectively. In other words, the /s/ which denotes plural determiner and adjective is almost always realized phonetically, either as [s] or as [h] (depending on phonological environment, as noted above) and seldom deleted (i. e., a very low frequency of S-0 or [Ø]). Thus the following noun phrases might easily have these pronunciations:

los altos	[los alto]
muchas cosas	[mučah kosa]
tantas amigas	[tantah amiga]
tantas cosas	[tantah kosa]

We can call this phenomenon the blocking of grammatical redundancy. As mentioned before, the standard rule in Spanish grammar states that all articles and adjectives must agree in gender and number with their governing nouns. But we note that once the plural marker has already been marked or realized on the article or adjective, by virtue of the very rule of agreement it becomes 'redundant' also to distribute it to the following noun. In the conversational styles, PRS speakers appear to eliminate this redundancy by using a more economical code, hence the common pattern of /s/-deletion on plural nouns. This pattern contributes to the overall impression of words being cut off or shortened at the end, an impression voiced by many of our

informants when asked for their subjective attitudes toward their Spanish pronunciation.

The last set of (S) subvariables deals with the final /s/ which is the verbal marker which indicates both 2nd person present tense and 3rd person copula 'be' or *es*. As our distribution table shows, we only have occurrences of (Sv) subvariables in the conversational styles, but even here, a pattern can be discerned, namely that value S-2 is the preferred variant. It would have been interesting to see whether /s/-deletion occurred more with the 2nd person marker (as we suspect is the case, given the grammatical redundancy of the subject pronoun *tú* which accompanies this verbal inflection) than with the copula *es*, but we did not make such a distinction between these two verbal categories in this study of (Sv) subvariables.

Finally, we might summarize the distribution of variable (S) in its varied phonological and grammatical environments by looking at Figure 7, which shows just the behavior of the standard variant S-1 as it ranges across styles. Only four of the subvariables are presented, but in these, the exceptionless behavior of a declining S-1 is clearly evident. The major break or frequency level is between the reading and speaking styles. In each subvariable, there is a sharp decline in this value between Styles C and WN. A second major decline occurs between WN and the conversational styles B and A. From B to A, there is relatively little difference since B is so close to the lowest possible range, but the important fact even here is that B is higher than A. In other words, there is no reversal of our general pattern of decline in the proportion of the standard value. In conclusion, it is an interesting fact that in the list style WN, the subvariables do not cluster around the same relative frequency, in contrast to their behavior in the continuous styles C, B, and A. It reinforces our belief that grammatical as well as phonological conditioning affect the realization of PRS variable (S). Had we not subdivided the variable into its subvariables, we would have missed some important structural facts which influence its behavior under stylistic variation. Our discussion of the variable (S) shows some very intricate and interesting socio-linguistic patterns occurring which reflect both phonological and grammatical considerations.⁷ These patterns are widely held throughout our PRS speech community and are norms of linguistic behavior in which its members, to a lesser or greater degree, participate. In Section 8 we will discuss more fully interspeaker variation and the linguistic variables by which speakers differ as well as the social correlates of these differing groups of speakers.

PRS Variable (RR). The range in phonetic qualities of morphophonemic trilled /rr/ is unique to the Puerto Rican pronunciation of Spanish, according to the accounts of Alonso, Zamora Vicente, and Navarro-Tomás, among others. Navarro-Tomás managed to collect as many as 8 different phonetic variants, but he combined them into three main types: apico-alveolar, intermediate alveolo-velar with friction, and velo-uvular fricative. It is the latter velar variant which has aroused the most comment by Spanish scholars. For example, Zamora Vicente states, somewhat defensively, that velar /rr/ in Puerto Rico 'does not occur as a simple defect or individual aberration, but [is] a collective linguistic habit' (330). Despite the widespread opinion that

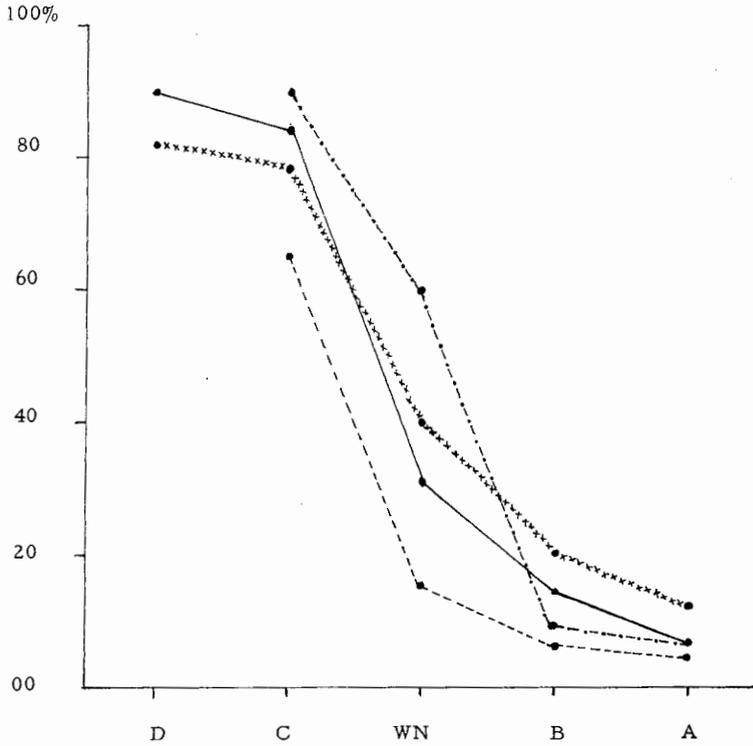


Fig. 7. Stylistic Variation of the Standard Variant S-1 of Variable (S) in PRS

Key to (S) Subvariables:

- (SC) —————
- (S#) (averaged from (Spl# V) and (Spl# C))
- (Spl) - - - - -
- (Sa# C) - - - - -