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THE COVARIATION OF [ə] WITH STYLE IN PARISIAN FRENCH: an empirical study of 'E caduc' and pre-pausal [ə]

1. Introduction

On the basis of Parisian speech data, the effect of style has been examined for the preservation or drop of 'E caduc' between two consonants - la s(e)maine, sam(e)di, tu l(e) connais - and for the presence or absence of a pre-pausal [ə]-like vowel (etymological or not) - Bonjour-e//, Philipp-e//.

An analysis of the use of the two linguistic features in question reveals different style patterns with respect to the parameters of reduction and elaboration. Whereas 'E caduc' is a typical case of reduction in speaking style as opposed to reading style, pre-pausal [ə] seems to be a case of elaboration of a pre-pausal element in speaking style.

The way in which the factor of age interacts with that of style reveals a well-known sociolinguistic pattern for 'E caduc', but an unexpected and much more complex picture for pre-pausal [ə].

2. Speech data

Speech data were collected in Paris and its suburbs in 1989. The 24 informants fit into three age groups (two generations) as follows:

	<u>Age</u>	
Group I:	15-19	(8)
Group II:	20-25	(8)
Group III:	40-55	(8)

The informants are equally distributed between men and women. They met two main criteria of selection that were set up in order to ensure a certain dialectal and sociocultural homogeneity:

- 1) They had lived more than half their lives in Paris or its suburbs.
- 2) They had - or had had - a privileged relation to the school system. Informants in group III had all completed a higher education (at least three years at a university or at an equivalent level). The young informants all had at least one parent that had completed a higher education, and were themselves either 'lycée' students (A-level students) or students at a university or at an equivalent level, depending on their age.

Three different styles were defined for each of the informants in the data collection.

READ: Reading aloud of texts in the presence of the researcher

INT: Interview with the researcher on the basis of a questionnaire

CONV: Free conversation between the informant, a friend chosen by the informant and the researcher

The reading task was assumed to be the most formal of the three styles. The two speaking styles - interview and free group conversation - were intended to differ in terms of formality and type of interaction, the conversation being closest to spontaneous speech.

3. Data analysis

The data analysis was primarily inspired by Labov's quantitative variationistic approach. The linguistic variables and variants of 'E caduc' and pre-pausal [ə] are described below.

3.1 The analysis of interconsonantal 'E caduc'

'E caduc' was defined as any orthographic e without accents in an orthographically open syllable. On the basis of this definition, an 'E caduc' in an interconsonantal context - (V)C_C - was perceived as a variable with the variants 1 (for preservation) and 0 (for drop). This approach made possible a quantitative expression of the number of retained 'E's in relation to the number of occurrences of the variable (a percentage of E-preservation).

The interconsonantal 'E caducs' included are those word-initially in the syllable (as semaine), those in word-medial position (as samedi), and those in monosyllabic words (je, me, te, de, ne, que, le, se, ce).

Instances where the 1-0 variation was not free (e.g. occurrences before 'h aspiré', as in le héros, where pronunciation of 'E' is obligatory), were naturally excluded from the calculations.

3.2 The analysis of pre-pausal [ə]

Before a pause, 'E caduc' is generally dropped. A well-known exception is the schwa-like echo that can be observed in an oratorical style, where final consonants are particularly clearly articulated (often transcribed as [(^ə)]). Note however that recent studies actually mention a full vowel in this position (1).

To our knowledge pre-pausal [ə] has not previously been studied in a variationistic way. Pierre Léon and Ivan Fónagy both express its use in terms of the number of actual occurrences, rather than as a percentage of realizations that could have been pronounced.

In this analysis, an attempt has been made to design a linguistic variable for the phenomenon. Since it seems to appear before a pause only - be it phrase-final (//) or phrase-medial (/) - its use is expressed as the number of pauses preceded by an [ə]-like vowel in relation to the total number of pauses (a percentage of [ə]-presence). Variants are 1 for presence and 0 for absence.

The pre-pausal context treated in this paper is characterized by one final consonant, whether this is followed or not by an orthographic e: .. C(e)/(//), as in ...diplôme// or ..du grec// (2).

Cases that seemed to be due to hesitation (euh) were naturally excluded.

A qualitative level of analysis was included for the positive occurrences of pre-pausal [ə]: the intonation pattern accompanying the segment and the exact pronunciation of the vowel were taken into account.

Seven different intonation movements were observed for the last three syllables before the pause, including that of the [ə] (the intonation was analyzed in CONV and INT only):



In all three styles four different phonetic realizations of the pre-pausal vowel were distinguished:

- [(^h)] a weak, echo-like schwa vowel, voiced
- [ə] a schwa vowel
- [ɛ̃] a nasalized schwa vowel (sometimes fronted and close to [ɛ̃])
- [a] a vowel close to [a]

The distribution of these prosodic and phonetic variants were compared for the styles defined, allowing us to discover the degree of legitimacy of the variants.

3.3 From analysis to results

An average number of 365 occurrences of the 'E caduc' variable and of 220 of the pre-pausal variable were counted for each speaker in total.

A percentage of preservation of 'E caduc' and a percentage of presence of pre-pausal [ə] were calculated per linguistic context, per style, and per age group. A statistic test (the T-test) was used to ensure that correlations between factors were only regarded as significant when a probability index of maximum 5% was respected.

4. Results

4.1 The effect of style on the linguistic variables

E caduc

The analysis of the use of 'E caduc' reveals that the preservation of the vowel is considerably higher in reading style than in the two speaking styles (INT and CONV). This result has been confirmed by many other studies (3).

The exact style pattern differs with the position of 'E caduc' in the word (see fig. 1). In the reading style, preservation is almost total for 'E's in word-initial syllables (90%), against 77% 'E'-pronunciation in monosyllabic words. In the speaking styles, however, these two types of position do not differ significantly (37% \leftrightarrow 32%). The word-medial 'E caduc's are practically never pronounced in the speaking styles of the informants (0.8%), but are pronounced in more than 20% of the occurrences in the reading style.

The effect of style on 'E caduc' is a typical one. Reduction takes place in the informal style, whereas elaboration occurs in the more formal style. Note in this respect that the mechanism of drop/preservation seems to operate at two different style levels only, speaking versus reading style. It does not seem to be influenced at all by the interactional difference between the conversation and the interview.

Position (V)C_C	CONV	INT	Speak.Style (CONV+INT)	READ
W.initial syll.	36% 175/487	38% 288/763	37% 463/1250	90% 1348/1493
Monosyll.	31% 360/1146	32% 582/1810	32% 942/2956	77% 919/1190
W.medial syll.	0.4% 1/267	1% 5/497	0.8% 61/764	21% 212/1004

Figure 1. Preservation of 'E caduc' for each style.

Pre-pausal [ə]

There seems to be no quantitative difference between the use of pre-pausal [ə] in CONV and INT (see fig. 2). The slight difference between its use in spoken language as opposed to reading style is not statistically significant either.

Position	CONV	INT	Speak.Style (CONV+INT)	READ
..C(ə)/(/)	17% 148/886	19% 262/1405	18% 410/2291	15% 351/2296

Figure 2. Presence of pre-pausal [ə] for each style.

Thus we have a linguistic variable which - quantitatively speaking - does not seem to be influenced by the style factor. This conclusion, however, is drastically changed when the qualitative level is taken into account.

The distribution of the different intonation patterns accompanying pre-pausal [ə] is not the same in CONV and INT (see fig. 3). The rising-falling intonation, which is the most frequent, occurs in 69% of the cases in CONV but only in 50% in INT. This particular intonation seems to be avoided when the formality of the speaking style increases.

Style	↘	↗	∨	↳	↗↘↘	Total
CONV	69%	16%	5%	7%	3%	100%
INT	50%	26%	10%	7%	7%	100%

Figure 3. Distrib. of intonation patterns for CONV and INT

As regards the exact pronunciation of the pre-pausal segment, a similar style shifting process is observed (see fig. 4). If we take the two most elaborate of the variants together - [a] and [ǣ] - we can see that the use of these two realizations decreases as the style becomes more formal (22% in CONV, 9% in INT, 4% in READ). The gradual decrease of these seemingly stigmatized variants is counteracted by the increase of the less stigmatized variant [(^ə)].

Style	[a]	[ǣ]	[ə]	[(^ə)]	Total
CONV	4%	18%	52.5%	25.5%	100%
INT	4%	5%	52%	39%	100%
READ	1%	3%	46%	50%	100%

Figure 4. Distrib. of phonetic variants (all styles).

Whereas the quantitative analysis showed no style effect on the use of the pre-pausal [ə], this qualitative supplement definitely proves that the realization of the segment - intonation and exact pronunciation - is to a considerable extent influenced by style. The different acceptability of the variants is even noticeable between the two speaking styles.

4.2 Correlation of age with style

A general sociolinguistic pattern seems to be valid for the variation concerning 'E caduc' (see figure 5). In the speaking styles, the young informants (Groups I and II) use the official prestige variant less frequently than the adults.

Age group	Monosyll.		Initial syll.	
	Speak.St.	READ	Speak.St.	READ
Group I	28%	89%	29%	94%
Group II	28%	69%	33%	89%
Group III	40%	74%	48%	88%

Figure 5. Preservation of 'E caduc': age and style

At the same time, the youngest informants (Group I) hypercorrect towards the prestige variant in the reading style, compared with the behaviour of Groups II and III. This cross-over pattern can be interpreted as a sign of linguistic insecurity.

For pre-pausal [ə], all age groups have approximately the same quantitative level in the speaking styles (see fig. 6):

Age group	Speak.St.	READ
Group I	17%	7%
Group II	20%	17%
Group III	16%	22%

Figure 6. Presence of pre-pausal [ə]: age and style

In the reading style, different trends emerge according to the age of the speakers. Group II seems practically indifferent to style. The youngest speakers clearly avoid pre-pausal [ə]s in the reading task, whereas the adult informants styleshift towards more pre-pausal [ə]s. This ap-

parently contradictory behaviour could be explained as the effect of two coexisting norms:

- a traditional norm, permitting postconsonantal [ə]-like vowels in reading style (adopted by adults);
- a recent norm, prohibiting pre-pausal segments in the reading style as a consequence of their expansion in the speaking styles (adopted by the youngest, and most insecure informants, who, as for 'E caduc', hypercorrect in this style).

5. Conclusions

This empirical study enables us to draw three conclusions:

- 1) There is no straightforward relation between the notions of reduction and elaboration and the notions of informal and formal style. Informal style is here characterized by a reduced variant of 'E caduc' but by an elaborate variant of the pre-pausal variable.
- 2) The number of styles defined in the research design (in this study two speaking styles and one reading style) does not necessarily correlate with the same number of different linguistic behaviours (cf. 'E caduc').
- 3) A look at the age factor gives important information about the norms involved in stylistic variation.

Bibliographic notes

- 1) Léon, Pierre (1987), "E caduc: facteurs distributionnels et prosodiques dans deux types de discours", in Proceedings XIth ICPHS, vol.3, p.109-112 & Fónagy, Ivan (1989) "Le français change de visage?", in Revue Romane, 24,2, p.225-254.
- 2) For other contexts (...CC(ə)/(/) and postvocalic) see Hansen, Anita Berit, Analyse sociolinguistique de deux évolutions linguistiques dans le français parlé à Paris: La stabilisation du 'e caduc' interconsonantique et l'apparition d'un [ə] final, mémoire de maîtrise, non-publié, sept. 1990, Université de Copenhague; or Hansen, Anita Berit, "Le nouveau [ə] prépausal dans le français parlé à Paris", à paraître.
- 3) For instance in the study by Léon cited in note 1 and in Lucci, Vincent (1976), "Le mécanisme du "E" muet dans différentes formes de français parlé", in La linguistique 12, fasc, 2, p. 87-104.

ABSTRACT

The effect of speaking style has been examined for two linguistic features in French. On the one hand, the variation between dropped and maintained interconsonantal 'E caduc' in word initial and medial position as well as in monosyllables (la s(e)maine, sam(e)di, tu l(e) connais). On the other hand, the variation between pauses preceded by an [ə] - be it etymological or not - and pauses without such a vowel (Bonjour(-E)!!, Philipp(-e)!!, A la fac(-E)!!).

The data corpus used is recorded in 1989 and counts 24 persons who have all lived more than half of their lives in Paris or its suburbs. Three different speaking styles are defined: reading; interview; conversation at three-hand (the informant, a friend of the informant, and the researcher). The informants fit into three age groups (15 to 19, 20 to 25 and 40 to 55 years old), and are equally distributed between men and women.

A quantitative analysis shows different style patterns for the two variables studied. Whereas the 'E caduc', as stated by other studies, drops largely in the two speaking styles, and is often maintained in reading style, the final prepausal [ə] shows a much more complex behaviour. The percentage of pronounced final [ə]s does not seem to vary with style at first hand, but qualitatively this is certainly the case: Certain prosodic features accompanying the final [ə] (especially the upwards-downwards movement of the intonation) are much more frequent in the conversation than in the interview, and moreover, certain phonetic realisations of the prepausal element ([ɛ̃], [a]) disappear gradually and are replaced by inoffensive variants like [ʔ] when conversation style is compared to interview style, and again with reading style.

If the 'E caduc' is a typical case of reduction in speaking style as opposed to reading style, the prepausal [ə] seems to be a case of elaboration of a prepausal element in speaking style, particularly salient in the most informal one of the two defined.

It should be added that the age factor interferes with the patterns mentioned: young and adults do not show exactly the same style shifting behaviour as regards the 'E caduc' and the prepausal [ə].