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Coherence in a levelled variety: The case of Andalusian

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Abstract

This paper¹ addresses three different but related issues regarding linguistic coherence within urban levelled varieties (Cerruti and Tsipakou 2020). First, whether the status of all the linguistic features of a variety is the same or should we accept the idea of a single salient feature functioning as a nuclear variable with the rest of the variables pivoting around it. Second, to what extent ongoing changes in the social meaning of a single variable affect coherence of the whole variety. Third, how macrosocial, meso-social and small-scale variables jointly work in developing a coherent variety made up of features from different dialects. Based on a series of results from previous studies on Andalusian, we show that the speakers' activity of combining linguistic resources for indexical purposes, does not always result in the unstructured mixtures of features characterising 'bricolage' practices. The same activity may lead instead to the development of coherent language varieties.

1. Introduction

This paper focuses on a variety boosted by middle-class speakers from southern Spain, apparently since the fifties of the 20th century but only recently expanded (Villena-

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Ponsoda 2018). Our main objective is to show how linguistic coherence is due to the effect of meso- and small-scale social variables, such as the speaker's positioning on the linguistic market and the indexing of socio-cultural identities, and how the speakers' activity of combining linguistic resources for indexical purposes does not always result in the unstructured mixtures of features characterizing 'bricolage' practices. The same activity may lead instead to the development of coherent language varieties.

To do so, we intent to capitalize on three previous studies and leverage their results as a way of further understanding questions of lectal coherence. Though coherence refers to every language component, we specifically focus on a set of phonological features since phonology has traditionally been claimed as the essential language component in characterising the southern dialects of Castilian Spanish. First, a multivariate PCA analysis helps understand the relationship between this set of phonological variables in the speech of specific individuals who share substantive social and linguistic characteristics; in other words, whether features of the current Andalusian urban middle-class speech behaviour are related to one another in such a way that we can talk of a coherent variety (Section 3, see Villena and Vida 2020). Second, an in-depth analysis on one of these features, namely a demerger—the splitting of the Andalusian coronal fricative /θ/— that seems to highlight some potentially very illuminating asymmetries between production and perception and reveals that the *emic* status of single salient features can be essential in the debate on the notion of language variety (Section 4, see Molina-García 2019, 2020). Third, a trend study on competing indexicalities in an ongoing phonological change—re-syllabification of aspirated /s/ before dental stop— that shows how changes in the social meaning of single variables can be better understood in the whole set of interrelated features (Section 5, see Vida-Castro 2016).

Finally, though social motivation of speakers of this variety has to do with social class and standardness, meso-social—social network, community of practice, etc.—and small-scale variables—identity orientation, degree of cosmopolitanism, etc.—interact with the former in a complex way and partially limit this influence. Notably, the speakers' situation in the linguistic market and their access to various forms of social and cultural capital (Bourdieu 1986) reveal themselves as the most influential factors (Villena-Ponsoda 2018). The question is then to what extent it is feasible to build a multivariate model able to depict interaction between the macrosocial, meso-social and small-scales variables underlying the speaker's use of the variety (Section 6).

2. Method and variables

Results commented on here come, on the one hand, from a corpus of data on the Sociolinguistic Patterns of Malaga Spanish (Malaga-PASOS), a research project based on a sample of speakers ($n = 54$) stratified by gender, age and education, in the context of a broader international project on more than twenty Spanish speaking cities in America and Spain (PRESEEA-Project). Data from the PASOS corpus were collected between 2013 and 2015. On the other hand, complementary data were also analysed from another corpus dated from the last decade of the 20th century (PRESEEA-Ma, 1993-1995, $n = 72$). In both cases, data were obtained from semi-structured interviews according to the international PRESEEA Project requirements (Moreno-Fernández 1996).

Data on speakers' orientation, attitudes and *marché linguistique* were obtained both by questionnaire and from their individual biographies (social life profiles).

The variety we deal with here is a blending of the Andalusian traditional innovative features with those from the more conservative central and northern Castilian varieties, close to the Castilian standard (Penny 2000):

(1) Andalusian unmarked pronunciation of codas is generalised and almost categorical in certain environments (the so-called “Andalusian accent”) but

(2) Consonant mergers in syllable-onset position are frequently stopped or even reversed.

Underlying this process of convergence and standardness is a trend of modernisation which began by the last decade of the Franco's rule in Spain (1939-1975). As a consequence, a supra-regional variety has expanded combining both unmarked and marked solutions to certain phonological problems.

Likely, the key of the acceptance of the new variety is that it sounds familiar to every speaker from central Castile and the nearby areas—*el acento de ningún lado*, 'the accent of nowhere'—where transition dialects (particularly, Extremadura and Murcia varieties) are spoken. However, this trend of convergence towards the standard use causes the increase of the distance between Andalusian vernacular—*el andalú cerraó*, 'the strong Andalusian accent'—and middle-class varieties.

Of the 11 phonological variables analysed, 9 occur in syllable-onset while 2 appear in syllable-coda position. On the one hand, as mentioned above, most of the changes taking place around the original emergence and further development of this middle-class variety have to do with the slowing down, detention or even reversion of a set of consonantal mergers in onset position, whose origin goes back to the late Middle Ages (Penny 2000). These changes brought about then simplification of the old Castilian phonemic system and hence, gradually separated the Andalusian dialect from the national standard of Spain, which kept close—with minimal changes—to the medieval stage. On the other hand, another trend of unmarked changes affected codas, favouring

open syllables in spite of the inevitable loss of either grammatical ([la'k:aθa] *las casas* 'the houses') or even lexical information (['pit:a] *pista* 'track', 'cue'). Though speakers of the levelled variety systematically avoid vernacular mergers, they accept to a certain extent the erosive changes in the codas (Table 1).

Table 1. Eleven syllable-coda and onset phonological variables in three varieties

| Variable | Variable label | Vernacular variety | Levelled variety | Standard variety | Spelling | Gloss |
|-------------------|----------------------------|--------------------|--------------------------|------------------|-------------------|-----------------|
| Coda | | | | | | |
| /-s/ before vowel | Final_Cero_V | lo o'liβo | loho'liβo | loξo'liβoξ | <i>los olivos</i> | the olive trees |
| /-s/ before stop | Affric_ts | 'pit:a | 'pitsa | 'piʒta | <i>pista</i> | track, cue |
| Onset | | | | | | |
| /s/ : /θ/ | PDemerger / Pmerger | 'poθo | 'poξo | 'poξo | <i>poso</i> | dregs |
| | | 'poθo | 'poθo | 'poθo | <i>pozo</i> | water well |
| /tʃ/ | Fricat_ch | 'peʃo | 'pe'ʃo | 'peʃo | <i>pecho</i> | chest, bosom |
| /x/ | Fricat_x / Aspir_x / Del_x | 'ko: | 'koho'kox ^h o | 'koxo | <i>cojo</i> | I take, lame |
| Intervoc. /d/ | del_d | 'de·o | 'de ^o o | 'deðo | <i>dedo</i> | finger |
| | | ko'mio | ko'mi ^o o | ko'miðo | <i>comido</i> | eaten |
| Merged /θ/ | PnoSibilant | θo'nio | ξo'niðo | ξo'niðo | <i>sonido</i> | sound |
| Merged /s/ | PSibilant | re'ʒa | re'θa | re'θar | <i>rezar</i> | to pray |

The 9 onset variables have been selected to show how convergence towards the standard variety works among southern speakers. This trend brings about the urban middle-class levelled variety, which has an underlying phonemic inventory where the standard contrast between (inter)dental /θ/ and (alveolo)palatal /s/ is recovered and rearranged—reallocated—as non-sibilant /θ/ vs sibilant /s/, both dental. This contrast

stops vernacular changes and so, standard-like patterns of pronunciation are preserved (Figure 1).

| | Vernacular | | | | Intermediate | | | | Standard | | | |
|-----------------------|---|-------|------|-----|----------------------|-------|------|-----|----------|-------|------|-----|
| | lab. | dent. | pal. | vel | lab. | dent. | pal. | vel | lab. | dent. | pal. | vel |
| tense | p | t | ʎ | k | p | t | ʎ | k | p | t | ʎ | k |
| lax | b | d | j | g | b | d | j | g | b | d | j | g |
| fricative | f | θ | | h | f | θ | | x | f | θ | s | x |
| fricative sibilant | | | | | | ʂ | | | | | | |
| | Changes ʎ → ʃ, j → ʒ θ → h, θ → ʂ ~ θ h → 0, ð → 0 | | | | Changes θ → s / θ | | | | | | | |

Figure 1. Phonological inventories and relevant changes in three varieties of contemporary Castilian Spanish

3. Lectal coherence

Previous results on older data inform us that the levelled variety is currently used by urban middle-class—mostly female—speakers of all ages (Villena and Vida 2020).

However, it seems that it is beginning to be spoken as well by young lower-class speakers, showing similar patterns of acceptance to those which occurred by the mid-fifties among middle-class speakers.

The question now is to what extent this variety is coherent and how its features are related to one another. Correlation between single variables form *clusters* which define underlying more complex variables or components. So, we can have an idea of the variables' communal distribution, which is compatible with the notion of a coherent variety: a set of variables which co-occur and have a similar social and stylistic distribution. Based on their similar variance, a factor analysis—Principal Component Analysis, PCA—was carried out. Though a total number of five factors were selected as significant, we identified only two principal components or dimensions which are easily

interpretable and can explain cross-dependence between the single variables (Jolliffe 1986).

The 11 phonological variables listed above (Table 1) were entered for running the multifactorial analysis. Table 2 shows the result of the factor analysis, restricted to the first two dimensions or factors found, explaining 59.7 % of the total variance (F1: 45.2, F2: 14.5). Despite the restriction of variance explanation due to voluntary trimming of factors, our final capacity of interpreting both underlying complex variables resulted from multiple correlation, recommended us to do so.

Among all the variables included, *Pdemerger* (i.e., splitting of /θ/) turned out to be the variable which accounted for the most variance and the best explained one by the multifactorial model (communality value after extraction and initial eigenvalue).

Table 2 Descriptives and Principal Component Analysis. Rotated Component Matrix

| | F1 | F2 | Mean | sd |
|-------------|-----------|-----------|-------------|-----------|
| Pdemerger | -.952 | -.013 | .5406 | .44289 |
| Fricat_x | -.864 | .035 | .4170 | .34871 |
| Affric_ts | -.360 | .693 | .3042 | .29857 |
| Del_d | .246 | .671 | .6186 | .19447 |
| Fin_Cero_V | .236 | .571 | .7926 | .18119 |
| PnoSibilant | .778 | .339 | .2750 | .37331 |
| Fricat_ch | .675 | .140 | .1810 | .33622 |
| Del_x | .695 | .024 | .1486 | .19334 |
| Aspir_x | .618 | -.001 | .3598 | .26255 |
| PSibilant | .492 | -.453 | .1844 | .26649 |
| Pmerger | .952 | .013 | .4594 | .44289 |

Method of extraction: Principal Component Analysis
 Method of rotation: Varimax with Kaiser normalisation
 Rotation converged in 3 iterations

On the one hand, the horizontal dimension (Component 1) represents variation on the standard/vernacular continuum and hence, suggests retention of standard conservative, phonologically marked, features (negative values) vs vernacular innovative unmarked features (positive values). The vertical dimension (Component 2),

on the other hand, seems to represent acceptance of southern pronunciation, far from polarised—either standard or vernacular—norms of use, sticking then to unmarkedness (Figure 2).

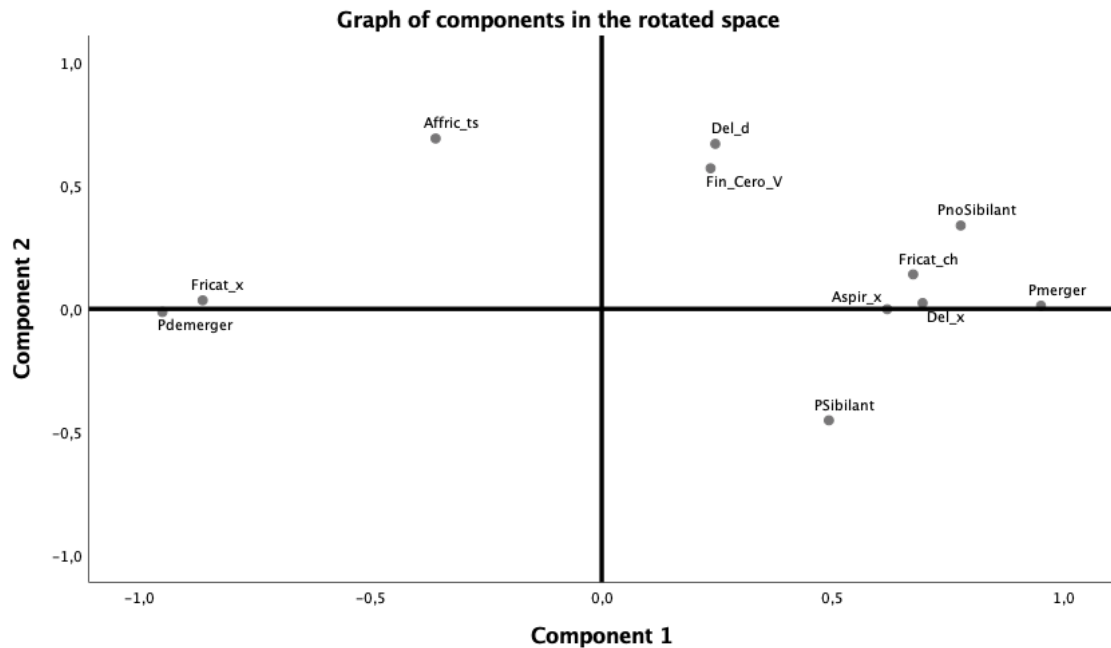


Figure 2. Two dimensions in the sociolinguistic space

As shown, on the horizontal dimension—on the left pole, with negative values—standard variables (PDemerger, Fricat_x) sharply contrast with vernacular variables—on the opposite pole, on the right, with positive values (PnoSibilant, Fricat_ch, Del_x, PMerger, Aspir_x). The use of the former variables means choice of standard-oriented patterns of pronunciation, as well as rejection of the vernacular phonological mergers. On the vertical dimension, positive values, above, indicate a tendency towards open syllables, i.e., unmarked outcomes (Fin_cero_V), compatible nonetheless with phonetic realisations close to their underlying representation (Affric_ts), as well as erosive changes (Del_d). One would hypothesise that negative values on this dimension could be identified with regional standard-like norms, which represent alternative uses to

those from the national standard from Madrid—like it is the case with sibilant merged PSibilant, called 'seseo'). Noteworthy is the fact that the polarised variables on the first component are neutral with reference to the second one —i.e., they gather around 0 values. The same applies otherwise. This is also compatible with the idea that there is a second regional dimension which does not identify itself with either of the two opposed poles in the first axis (standard or vernacular).

Speakers of the levelled variety, in fact, accept the standard-like variables from the left pole of the first dimension, as well as all the variables along the horizontal axis (of course with decreasing frequency on along), but clearly avoid the vernacular variables from the right pole. This means using, at the same time, both conservative marked and innovative unmarked features—the former mostly in syllable-onset position, and the latter in the codas.

4. Perceptual coherence. Coronal fricatives

On the above-mentioned idea of a single feature playing a specifically relevant role in the whole set of interconnected variables, a question remains: why, in the first place, the speech community members perceive not-existing differences as revealed by intensive acoustic analysis? Is it simply incompetence or inconclusion of the analysis we are referring to? Should we talk of any sort of an acoustic-perceptual dissociation? The case of the coronal /θ/ shows us how to proceed with nuclear variables which act as the centre of an entire set and determine its limits either when lectal coherence—i.e., a set of intercorrelated variables—exists or when it lacks. One interesting issue is whether a delimited non-coherent variety can exist only for its own speakers and exclusively based on a nuclear salient variable. Here, /θ/ is a salient feature which stands out among a set of levelled features based on middle-class mimesis of standard speech norms.

4.1. Social distribution of the coronal fricative /θ/ demerger

Both salience and the speech community awareness of a social meaning of modernity and standardness associated with this variable have been found in previous work (Molina-García 2019, 2020; Regan 2020). As explained above (Section 2), demerger of /θ/ suggests reallocation (Britain and Trudgill 2005) of Andalusian strident [ʃ] (ʃer'βeʃa) and mellow [θ] (θer'βeθa) allophones as contrasting phonemes /s/ : /θ/, both dental ('poʃo 'dregs' vs 'poθo 'water well') following the standard contrast (see also Figure 1, above).

To approach centrality of a particular variable within a variety, two complementary ways are available: first, given the indexicality mentioned above, by focusing on the interpretation of the variable's distribution and, particularly, on its social class stratification results; second, through scrutiny of the speech community perception—that is, observing and analysing the speakers' reactions to the functionally specialised variants of the variable (*merger* or *split*). Both options have been considered so far showing the existence of frequent and conspicuous rejection of the vernacular merged variant and—what is, at first glance, surprising—the presence of a sort of acoustic-perceptual dissociation.

To be able to carry out a skew-less scrutiny of the social stratification of /θ/ demerger, complementary to auditive analyses, the acoustic distance of the /θ/ and /s/ realisations by each of the 54 speakers from the corpus was calculated (Molina-García 2019), based on the Euclidean distance of mean values of a set of standardised acoustic parameters—intensity, duration, zero crossings, centre of gravity, among others)—underlying occurrences of the word series CASA, POSO ('house', 'dregs') and CAZA, POZO ('hunting', 'water well'). Hence, a single value is then obtained reflecting the

mean acoustic distance [s] – [θ] for a particular speaker's occurrences according to etymology or spelling. Once these values are scaled, we obtain a single value between 0 and 1, where 0 means that the speaker articulates the same sound regardless of the word's etymology, and 1 that the speaker's produced allophones have values of the acoustic parameters which clearly diverge from one another according to etymology.

Acoustic distance between occurrences of /s/ and /θ/ significantly varies depending on the age and educational level of the speakers (Table 3). As shown, it is the youngest and most educated speakers who lead the demerger of /θ/. As expected, acoustic distance between occurrences of word series with either /θ/ (CAZA) or /s/ (CASA) rises as far as the speaker's age decreases and their education attains post-compulsory stages.

Table 3. Effects of education and age on acoustic mean distance between /θ/ and /s/

| <i>Acoustic Distance</i> | A | B | C | D | \bar{X} |
|--------------------------|----------|----------|----------|----------|-----------|
| | 0.11 | 0.30 | 0.32 | 0.50 | 0.37 |
| sd | 0.09 | 0.24 | 0.20 | 0.31 | |

A: Compulsory Education > 55 years (N = 6)
B: Compulsory Education < 55 years (N = 12)
C: Post-Compulsory Education > 55 years (N = 12)
D: Post-Compulsory Education < 55 years (N = 24)

ANOVA: $p < .001$

4.2. Community perception of coronal fricative /θ/ demerger

Given that splitting of /θ/, as measured through acoustic distance between occurrences, seems to be constrained both by age and social class, one would expect (1) that the speech community members systematically perceived differences and (2) that their reactions and attitudes towards either standard-like distinction or vernacular merger would show accordance with this pattern.

To that end, two speakers from the two most polarised interactive (age by education) groups were selected: first, a 23-year-old speaker with university studies and

mean acoustic distance of 0.70 and, second, a 56-year-old speaker with compulsory studies and mean acoustic distance of 0.11. Both speakers read 30 words (plus some distractors as well), of which 15 were real minimal pairs (POSO-POZO, CASA-CAZA) and 15 invented minimal pairs (MISO-MIZO; BUSE-BUCE). The lists of minimal pairs were listened and evaluated by 54 judges, all members of the speech community, classified by gender (male or female), education (primary, secondary and university) and age (18-34, 35-54, > 54). These judges were asked, first, to identify the words and, second, to answer to some questions regarding their reactions and attitudes on the voices (see Molina-García 2020).

On the one hand, frequency of correct identification of words according to their spelling varied from 97.34 for the young university-educated informant's voice to only 5.80 for that of the older primary-school informant's ($p < 0.001$). Incidentally, no significant differences were found between real and invented words. Identical lack of significance occurred, on the other hand, with differences in the judges' sample.

All of this suggests that members of the community perfectly perceive contrasting allophones of /s/ and /θ/ whenever they are neatly separated. However, this assumption inconclusively meets comparison of auditive and acoustic distance variation even among the young university educated speakers. Since the mean acoustic distance for the latter group is $.50 \pm .31$ —the highest, as it would be expected—, we should likely understand that a certain number of occurrences of the same phoneme—either /s/ or /θ/—would have been realised close to one another, which would likely bring about disturbance of perception. Nevertheless, in spite of these apparent acoustic limitations, nothing of this occurs. First, frequency of demerger on auditive analysis is much higher than the one found on the acoustic analysis (Table 3, above). Second, the speech

community reactions to split reflect, as expected, awareness of its social meaning (Table 4, below).

Table 4. Effects of the speaker's age by education variable on auditive perception of /θ/ demerger and judges' perception of /s/ and /θ/ minimal pairs by two polarised speakers

| Auditive perception of /θ/ demerger | | | | | |
|-------------------------------------|--------------------|--------------------|-------------------------|-------------------------|-------------|
| | > 55 Compulsory | < 55 Compulsory | > 55 Non- Compulsory | < 55 Non- Compulsory | Total |
| | 37 | 122 | 181 | 424 | 764 |
| Split | 30.8 | 50.8 | 75.4 | 88.3 | 70.7 |
| | 83 | 118 | 59 | 56 | 316 |
| Merger | 69.2 | 49.2 | 24.6 | 11.7 | 29.3 |
| | | | | | 1080 |

| Perception of /s/ vs /θ/ minimal pairs | | |
|--|---|--|
| | <i>Young informant with higher education, acoustic distance 0.7</i> | <i>Older informant with compulsory education, acoustic distance 0.11</i> |
| <i>Pronunciation</i> | Fine and clear voice with good pronunciation He pronounces clearer and is better understood He has a more correct diction and a better use of "s" and "c" | Tough voice using "c" instead of "s" He speaks <i>Malagueño</i> Difficult to understand |
| <i>Social class</i> | High A lot of money He is a cultured and educated person | Middle Medium-low class He is not so educated |
| <i>Origin</i> | City, Capital Malaga, Madrid, Valladolid (capital cities) | Village, Rural Alozaina, Almogía, Campillos (villages) |
| <i>Usual context of meeting</i> | Limonar, Centro, Cerrado de Calderón (accommodated neighbourhoods) University (23 times) Bank office Literary ambience | Huelin, Miraflores, La Palma (humble neighbourhoods and slums) Pub (12 times) Hardware store At pubs drinking beer |

Judges of the perception test described the young informant's voice, which showed a large acoustic distance between [s] – [θ] occurrences, as belonging to someone cultured, with *good* pronunciation, from the most prestigious neighbourhoods in Malaga

capital (even from central Spain) and of high social class, while the voice of the older and less educated informant, with scarce acoustic distance between his realisations, is repeatedly perceived as associated with someone with *bad* pronunciation, whom one would expect to meet at pubs and hardware stores and likely coming from either a rural town or a marginal neighbourhood in Malaga (Table 4). Given the likely slanted influence of the speaker's age on the judges' assessment, the experiment was repeated with similar results.

4.3. Acoustic-perceptual dissociation

The contrast revealed between acoustic distance measures and auditive transcription deserves more attention. However, a likely explanation emerges from the fundamentals themselves of this study. As commented on above (Section 3), demerger of /θ/ is the best fitted and best explained variable in the multifactorial model built to represent the levelled variety. This reinforces our initial idea of /θ/ splitting as the nuclear variable of this variety and makes us think that the acoustic-perceptual dissociation underlying the contrast between acoustic and auditive results is not at all accidental. As shown in the perception test, the speech community seems to have developed the capacity of perceiving as different, phonetic realisations that, in fact, are acoustically very close. This would mean that the /θ/ demerger is perceptually far more advanced than acoustically. The speech community polarisation could play here a non-negligible role but the fact is that in the preliminary results we deal with, a moderate overall mean distance of 0.37 strongly contrasts with an average probability of 0.70 of /θ/ split.

Therefore, in spite of the mainstream social prestige associated with the splitting of coronal fricative allophones—at least, with the required minimal acoustic distance between them to make perceptually possible the difference in accordance with both

word series— it seems that no special effort is made by speakers to escalate the acoustic distance, exception made of a reduced number of them. A real motivation for splitting a merger surges only when a phonological merger is quite stigmatized in society (Maguire *et al.* 2013: 234-235). As long as this motivation exists, it appears not being a problem such little a distance, especially if we compare it with the usual one in the standard variety.

5. Competing indexicalities in coda /s/ retention

The Andalusian levelled variety is a synthesis of standard and southern features of pronunciation, which reveals actual coexistence of innovative phonological unmarked features—i.e., syllable-coda harmony and a certain degree of simplicity in the inventory of phonemes— and conservative marked features—i.e., closeness of phonetic outputs to the underlying phonological forms in spite of markedness. Such a blending of traits raises the issue of to what extent this situation can lead to changes in social meaning.

5.1. Marked and unmarked variants of syllable-final /s/

Lenition of consonants in syllable-coda position is one of the most frequent and extended features among southern varieties of Castilian Spanish—and, precisely, the most likely accepted vernacular variable (Fin_Cero_V, see Table 2) by speakers of the levelled variety. The most salient outcomes of this process are aspiration and deletion of syllable-final /-s/. As it is well known, this phonological cross-linguistic process is triggered by universal constraints that promote unmarked open-syllable structures in spite of increasing the distance between each phonetic surface realisation and its underlying phonological form (Vida-Castro 2004). The opposed tendency to match both

parts—despite markedness—prevails among conservative (northern Castile, including the standard variety) and transitional—central Castile, Extremadura and Murcia—varieties). While deletion of /s/ in word-final position is almost categorical among vernacular speakers, regardless of its conveying grammatical meaning (['lune] *lunes* 'Monday', [la'meθa 'anʃa] *las mesas anchas* 'the wide tables', ['tu 'mira a 'to:], *tú miras a todos* 'you look at everyone'), speakers of the levelled variety tend to preserve /s/ by means of its aspirated allophones (['tu 'miraha'to^ho] *tú miras a todos* 'you look at everyone'). Frequency of the latter use substantially rises in word-internal position, where post-aspirated and affricate allophones are quite usual ['pat^ha] ~ ['patsa] *pasta* 'dough', which somewhat involves maintenance of the underlying phonological segment /s/ and, hence, differences between the word sets with /s/ (PASTA *pasta* 'dough') and without it (PATA *pata* 'leg'). In this way, conservative marked options are, to a certain extent, made compatible with unmarked phonetic outputs—here manifested through re-syllabification.

Two of the variables included in our previous multifactorial analysis (Section 3) have plenty to do with this phonological issue: first, word final /-s/ before vowel (Fin_Cero_V) and second, word-medial /-s/ (Affr_ts). The former focuses on *liason* phenomena ([lo·ha'mi·yo] *los amigos* 'the friends', ['θa·βe'har·yo 'de·θo], *sabes algo de eso* 'you know something about it') as a likely procedure of retaining grammatical meaning. The latter refers to /s/ preceding stops (/ 'kas·ko/ *casco* 'helmet', / 'bis·to/ *visto* 'seen') and can be realised as post-aspirated ['ka:·k^ho] or ['bi:·t^ho] (Torreira 2012) competing with either pre-aspirated ['kah·ko] or ['bih·to] or even deleted variants ['ka·k:o] or ['ra·p:a]. As expected, frequency of retention of the underlying /-s/ in word-medial position through re-syllabification is much greater in the middle-class levelled variety than in the vernacular dialect (Villena and Vida 2020: 155-158).

More specifically, when word-medial /-s/ is followed by the voiceless dental plosive phoneme /t/ (i.e., *pasta* /'pas·ta/ 'dough'), the analysis of recent data shows evidence of a further evolution of the post-aspirated stage to such an stage that emergence of an affricate allophone [ts] has been hypothesised (Vida-Castro 2016). This affricate realisation, i.e. [pa·tsa] for *pasta* or [i.'tso·rja] for *historia* 'history,' is very commonly used by young speakers in Malaga, but it also appears in other varieties of southern Spanish (Moya-Corral 2007; Ruch and Harrington 2014).

The acoustic analysis of realisations of the /-st/ sequence by the 54 speakers from Malaga has shown that: (1) both post-aspirated [t^h] and affricate [ts] realisations of /-st/ are the result of re-syllabification leading to open-syllable structures and (2) statistically significant differences arise when the acoustic characteristics of the post-aspirated [t^h] and affricate [ts] allophones are compared (Vida-Castro 2021).

The existence of such post-aspirated variants of /t/ after underlying /-s/ in Andalusian Spanish and its evolution to affricate stages is an unmarked outcome in this particular context that, on the one hand, allows the realisation of an open syllable without loss of phonetic material and, on the other, maintains the contrast in word sets such as PASTA and PATA ('dough' and 'leg'), which suggests, in turn, closeness between surface realisation and the underlying form.

5.2. The reinterpretation of social meaning

Since frequent retention of word-medial /-s/ /'pas·ta/ through re-syllabified aspirated [h] ['pas·ta > 'pah·ta > 'pa·tha] is a current feature of the middle-class levelled variety, it would be relevant to know whether further stages of its evolution—in particular, the affricate allophone [ts]—keep the same social meaning as the post-aspirated realisation [t^h] or if new indexicalities have appeared. To test on this issue, both frequency and

social distribution of the affricate [ts] variant were compared in two similar corpora—PRESEEA-Ma and PASOS-Ma—separated by a 20 years gap (1995-2015). The overall results show that the frequency of this allophone has grown during the last 20 years, especially among the younger speakers (58% of the [ts] sequences), which was, in fact, the only group of speakers who promoted this realisation during the nineties (26%).

However, the most striking fact comes when we zoom in on the youngest group of female speakers. As shown in Figure 3, during the nineties, only young women with university education produced this affricate sound (39%). Accordingly, it could be expected that 20 years later the use of this allophone had dramatically soared among speakers of this social group. Nevertheless, current data reveal that although the feature is now much more frequent among young women of every education level, it is the less-educated female speakers who lead this change. When data from the two corpora are compared, one realises that this group scarcely used the affricate allophone in the nineties (only a 10% of the occurrences), whilst their current realisation is almost categorical now (80%).

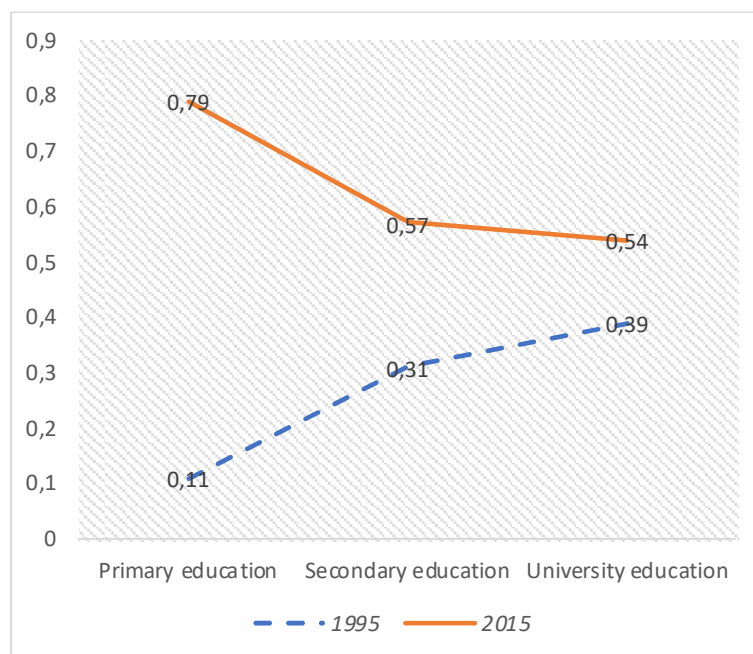


Figure 3. Effect of education on the use of affricate [ts] among young female speakers through time

It can then be suggested that this new affricate allophone has been involved in an enregisterment process and, hence, that its social meaning has changed or, at least, is currently changing. In fact, this feature reflects two different types of indexicality depending on which social group is using it. Though this change deserves much more work, it strikingly reminds of the one concerning aspiration of English intervocalic dental plosive /t/ (Eckert 2012: 96-97), which is a classic example of stylistic reinterpretation. Furthermore, recent research on the social meaning configuration of features in the Malaga urban variety (Chariatte 2015: 130-55 and 160-79) has revealed how this particular allophone is perceived as a prototypical non-standard feature by the speech community members.

6. Proactive speaker. The linguistic market as source of meaning

The bidimensional space established through multiple correlation between the single variables dealt with in sections 2 and 3 can be imagined as a cognitive and perceptual space. There, each speaker's position is identified as determined by their social class, age, gender or geographical background—i.e., the speaker's variety as a set of intercorrelated features. Alternatively, the speakers' position can be also understood as accomplished by the individuals themselves through their proactive behaviour and social meaning construction—that is, their individual interpretation or the different stances they can take in particular contexts or with specific purposes.

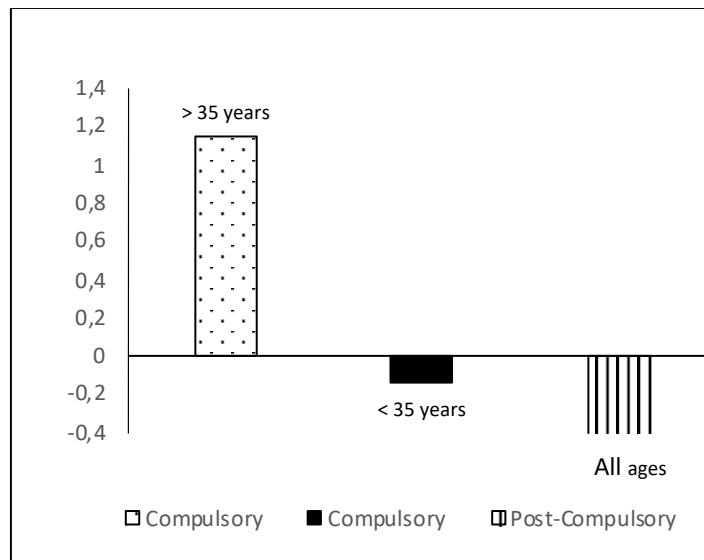
Methodologically, it seems necessary to break down this process into two steps since we need to know, on the one hand, which macro-social variables constrain the speakers' place and then determine the linguistic variants they are supposed to use before considering, on the other hand, why and how the expected behaviour should be

broken and modified to a certain extent, as a consequence of the effect of meso- and small-scale variables.

6.1. The effect of macro-social variables

The question then is which speakers use which set of variables. As expected, bearing in mind previous results on data from older corpora (see Villena-Ponsoda 2018), we know that middle-aged and older speakers with compulsory education use the set of vernacular features (on the right pole of the x axis in the bidimensional space of Figure 2, above). Nevertheless, younger speakers with the same level of compulsory education tend to adhere to middle-class norms of use. Meanwhile, post-compulsory education speakers of all ages react against vernacular pronunciation and use the levelled variants—including not only the features explicitly noted on the left pole of the x axis (fricative [x] allophones of /x/ and contrast between /s/ and /θ/), but also the consequent rejection of the six vernacular features clustered on the right pole and their substitution by their standard-like counterparts.

As shown in Figure 4, use of x axis-positive vernacular features is clearly expected for both middle-aged and older less-educated speakers, which implies rejection of the standard-like urban middle-class features characterising the levelled variety.



$F = 20.907 (2)$, sig. < 0.001 , $R^2 = 0.46$

Differences between—from left to right—either groups 0 and 1 or 0 and 2 are significant ($p = 0.001$ and $p < 0.001$ resp.). Differences between groups 1 and 2 are statistically not significant

Figure 4. Education and age differences on the use of the levelled variety. Source: adapted from Villena and Vida (2020: 176)

When we consider the effect of gender on both axes, we find out that it is female speakers who lead scores on standardness (x axis) and southern pronunciation (y axis) since they tend to be negative to a greater extent than those of men. This means that women adhere tighter to standard and southern, regionally accepted, unmarked features and stronger reject vernacular variants than men do. Differences on age and education are also apparent and significant (standardness: $p < 0.001$, $R^2 = 51\%$, southern pronunciation: $p < 0.001$, $R^2 = 37\%$).

6.2. Meso- and small-scale variables. The linguistic market effects

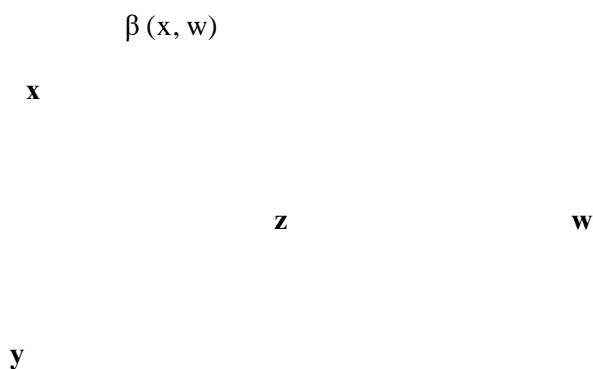
As explained above, acquisition and use of the levelled variants are understood as the outcome of an elitist change strongly conditioned by social class—here observed through the individual's education—and particularly by the standard orientation of speakers. The question now, however, is to know why the speaker variables related to the macro-social dimensions—and particularly, social class—are not enough to explain

a satisfactory deal of the individual behaviour (the proportion of overall variance explained by macrosocial factors does not attain 47 %, and it only moves forward to 51 % whether interaction of age, education and gender is considered).

One of the most striking facts regarding this variety is how macro-social dimensions and both meso-social and small-scale entities interact to explain the exact nature of the proactive speaker responsible of its spreading. As seen from Bourdieu's theory of the cultural capital and social market (Bourdieu 1984, 1986), the so-called incorporated cultural capital (*capital culturel incorporé*), acquired by speakers who are interested in the flow of media and knowledge—currently also the internet information—acts as an intervening variable multiplying the effect of both the objectified and institutionalised capital (*capital objectivé* and *capital institutionnalisé*), i.e., respectively the one learned at home and at school in the broadest sense of the word. The picture displayed tends to underestimate direct effect of the speaker's education and that of their parents' on the speech use and, at the same time, underlines their indirect influence through meso-social and even microsocial variables. Furthermore, the effect of the individual speaker's cultural capital on the use of the levelled variety is controlled or mediated by their orientation towards standardness and social meaning of modernisation (cosmopolitanism). As suggested before, *not all and not only* educated speakers use the levelled variety (Villena-Ponsoda 2018). In this way, *cosmopolitanism* reflects the speaker's external ties and their attitudes towards knowledge and social life.

To capture this interaction, a multivariate model representing direct and indirect effects was built to give an idea of the social space where speech variation actually occurs. To account for the effects of the speaker variables on the standard/vernacular dimension underlying the use—or disregard—of the levelled variety, a multivariate

model capable of representing direct and indirect effects on a particular variable would be appropriate. This kind of model allows us to show the effect of one variable which is controlled by that of the other variables, as it is the case with the Structural Equation Model (SEM), also known as Structural Mediator Analysis and Path Analysis. This analysis fits quite well this objective (Paxton, Hipp and Marquart-Pyatt 2011). SEM is a model based on multiple lineal regression analysis that estimates not only direct effects by certain variables (x , y) on the endogenous or dependent variable (w), but also indirect effects by the same variables or by others across intervening variables (z). So, a diagram composed of different direct (x , w) or indirect (x , z , w) paths between independent (exogenous), intervening and dependent (endogenous) variables is drawn:

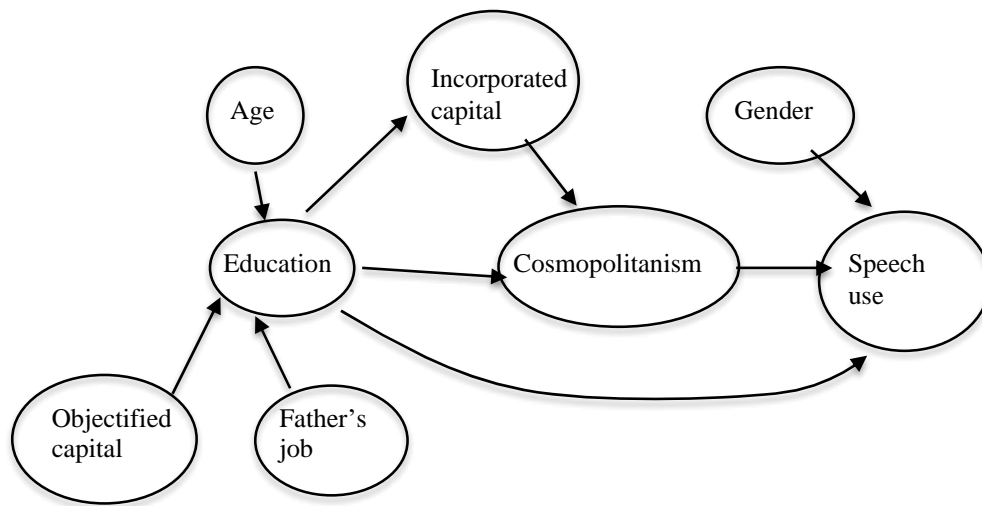


To represent the diverse paths of influence—indirectly through intervening variables, or directly on the endogenous variables—we hypothesised a path model (see Figure 5, below) that focuses on the effect of the speakers' social class (measured by their education and age), controlled by that of their household context of acquisition (*capital culturel objectifé* and father's job). With this, we tried to grasp Bourdieu's idea (1984, 1986) of the *capital culturel institutionnalis * (the individual's education) as determined by the objectified cultural capital around which the speaker grew during their infancy. However, even though both types of cultural capital are responsible for a

relevant part of the individual's position in the social, cultural and linguistic market, he or she is also able to obtain and increase a third type of capital, the *capital incorporé*, which may be seen as the outcome of a personal inversion by the actor—*libido sciendi*—and affects, among many other things, the individual's attitudes towards the media and linguistic standardisation in society.

In a way, then, as shown below (Figure 5), variables representing the objectified capital and the institutionalised capital (1) control both the incorporated capital (2), and ultimately constrain the speaker's speech use and, hence, a particular linguistic variable (3). In essence, though macro-social variables can directly determine the speech use, they are not the exclusive factors of influence but only the first step.

It is crucial to notice the role of the individual's cosmopolitanism (namely, a small-scale variable that measures the speaker's both effective and symbolic external links, as well as their attitudes towards modernity, urbanism and the flow of information) as a central intervening variable between macro-social variables—institutionalised and objectified capital—and the speech use, not to mention, of course, its position as mediating the influence of the subject's incorporated capital.



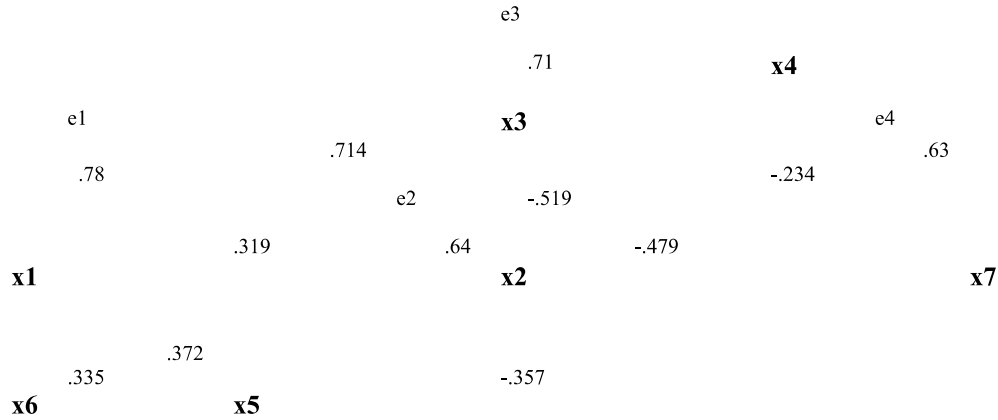
1. Institutionalised and objectified capital 2. Incorporated capital 3. Linguistic variable

Figure 5. Structural Equation Modelling on the speech use

Figure 6 shows the path analysis of the interaction between exogenous (x1, x3 and x4 to x6) mediating (x2) and endogenous or dependent (x7) variables—the latter here is the use of the vernacular features, i.e., positive values on the x axis in the PCA (section 2). All the effects on the use of the vernacular features are negative, which means that all the independent variables and paths restrain the use of the vernacular features and, hence, favour the use of the levelled variety. The speakers who currently use the levelled variety have low positive scores—or have them negative—on the x dimension of the sociolinguistic space drawn from the above-mentioned PCA model. Thus, speakers of the levelled variety—as deduced from results of the SEM analysis—are secondary or university educated individuals, mostly female, whose social life is oriented towards standardness, knowledge and the flow of information that characterise urbanism and modernity.

Though the path analysis model does not, in fact, add much to the jointly explained variance by the most influencing variables—namely, direct and indirect effect by the interactive variable of education by age through the speaker's cosmopolitanism, as well

as the direct effect by cosmopolitanism itself—it helps us understand how macro-social definition of the speaker can be constrained by the way each one of them interpret social life and proactively try to change it. Thus, the speaker's linguistic behaviour gets closer to careful observation and interpretation.



Direct and indirect effects on vernacular use

Effects on F1

| | x1 | x2 | x1* x2 | x1*x3*x2 | Direct | Total |
|---------------------------|-----------|-----------|---------------|-----------------|---------------|--------------|
| x1 Edu/Age | — | -.153 | | -.178 | -.357 | -.688 |
| x2 Cosmopolitanism | | — | | | -.479 | -.479 |
| x3 Incorp. Capital | | -.249 | | | | -.249 |
| x4 Gender | | | | | -.234 | -.234 |
| x5 Father's job | -.133 | | -.057 | -.066 | | -.256 |
| x6 Object. Capital | -.120 | | -.051 | -.059 | | -.0.23 |

All effects are significant ($p < 0.001$). Gender ($x6$) is a dummy variable, where 0 = male, 1 = female

Equations

Eq1. $\text{EduAge } x1 = x5 + x6 + e1$. $R^2 \text{ corr.} = .395$. ANOVA (2, 43) $F = 15.088$, $p < .001$

Eq2. $\text{Cosmopolitanism } x2 = x1 + x3 + e2$. $R^2 \text{ corr.} = .589$. ANOVA (2, 45) $F = 33.301$, $p < .001$

Eq3. $\text{Incorporated Capital } x3 = x1$. $R^2 \text{ corr.} = .498$. ANOVA (1, 45) $F = 45.721$, $p < .001$

Eq4. $\text{Vernacular Use} = x1 + x2 + x4 + e4$. $R^2 = .611$. ANOVA (3, 44) $F = 24.001$, $p < .001$

Error: $\sqrt{1 - R^2}$; $e1 = .70$; $e2 = .65$; $e3 = .86$; $e4 = .63$

Explained variance: $1 - (e4)^2 = .60$

Figure 6. Diagram of the multi-causal process of the effects of macro and small-scale variables on the use of vernacular features

7. Conclusion

In this paper we have pointed to the balance between, on the one hand, lectal coherence and, on the other, the conflicting relation between unmarked vernacular use and mainstream social prestige in linguistic behaviour. The study of coherence of an Andalusian emergent levelled variety, and how its speakers cope with both change and stability, has revealed some relevant points:

(1) Multiple correlation between single variables representing the phonological features currently used by urban speakers from Andalusia reveals an underlying complex variable which suggests a quite polarised standard/vernacular dimension. Given that this dimension mathematically reflects how the single variables are used and how much variance they share, we are likely to observe and predict the speakers' probabilities of using both sets of intercorrelated variables—standard and vernacular. In other words, we can analyse both varieties of interest here—the levelled standard-like variety and the Andalusian vernacular dialect—and test on their respective constraints (Section 2 and 3).

(2) The role of a particularly salient feature, which could be considered the core variable of a non-necessarily coherent variety, highlights the speakers' perception as a relevant factor in establishing its limits and even, its sheer existence. Demerger of coronal fricative /θ/ is the most powerful variable in terms of its contribution to the common dimension—the standard/vernacular continuum—and, hence, a good candidate for that role. As expected, the larger the acoustic distance between allophones of the contrasting phonemes /s/ and /θ/, the higher the speaker's social class. However, unexpectedly, perceptual differences are much larger. Then, a kind of acoustic-perceptual dissociation seems to turn up that makes us think of a certain acknowledgment by the speech community members of the variable's relevance itself.

Perhaps, this is about both the consequence of the variable's salience and the speech community awareness of its social meaning. In fact, it is not only a matter of auditive-perceptual discrimination of variants—which turns out to be indisputable on the basis of the community members judgments—but also a meta-sociolinguistic issue (Section 4).

(3) Slowing down of vernacular erosive changes in coda position characterises the southern levelled variety, which increases its distance from the strongest vernacular dialects. The way speakers of this variety work to accommodate to standard-like features keeping unmarked, at the same time, the syllable structure, is through mechanisms of re-syllabification. By moving underlying syllable-final /-s/—realised as [h]—to the next syllable, the phonetic material keeps basically intact while marked syllable structures are avoided. This seems to have been the case when we consider data from the last decade of the 20th century (PRESEEA-Ma corpus), whose younger middle-class female speakers led re-syllabification and further assibilation of /-st/ suggesting indexicalities of cosmopolitanism and modern urban life compatible with the features of the levelled variety. However, data from the first fifteen years of the 21st century (PASOS-Ma corpus) show that the social meaning of the assibilated allophone has been adopted and decidedly pushed onward by working-class females (Section 5).

(4) The speakers' capacity of proactively modifying their situation in society and social life—as Bourdieu proposes with his concept of incorporated cultural capital—plays a relevant role as a small-scale mediating variable linking macro-social entities and individual speech behaviour. Reconstruction of the social space constraining vernacular use—or, *mutatis mutandis*, the use of the levelled variety—has revealed that the essential effect of the speakers' education and age is not only a direct influence on the linguistic variable, but an indirect one through this kind of mediating variables. The individual's cosmopolitanism—controlled by the incorporated capital— as well as the

rest of the forms of cultural capital, turns out to be the variable with the strongest direct effect on the speech use. In this way, the hypothesis of the modern well-informed urban speaker who is trying to escape from the rural context and willing to adhere to current modernity and standardness seems to gain strength (Section 6).

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