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Social Aspects of Oral and Written Lexical Production in Spanish

Abstract

Different research studies have shown that the processes of lexification and standardization that come into operation during lexical production revolving around different semantic categories vary according to the different social groups. Moreover, prior experimental studies have pointed out that a change in modality in the production (oral tests vs. written tests) does not alter the quantitative results, but does seem to significantly affect the qualitative outcomes. The objectives of this study are firstly to analyse how lexical production in both modalities is affected from the point of view of the formal mechanisms of actualization and secondly to determine whether there is a variation among the different social groups, particularly between the production of gender, and how this variation is related to social constructionism and cognitive linguistics theories. To perform the study, tests were administered to 60 native Spanish speaking students of the University of Salamanca (Spain). General aspects of the conceptualization of semantic fields within the different lexical cultures were also qualified. All of this helps us to define more clearly the variation in the linguistic material of the different “lexical cultures” that form a speech community.

1. Introduction

The study of the modality change in linguistic communication has pointed out that a gradual continuum exists in the modes or realizations of oral and written communication. Thus, although both orality and writing have characteristics that pertain exclusively to each of them, a continuous permeability exists between the ways the features of modality are manifested (Briz 1998; Escandell 2005: 50–53). This can also be seen in the processes of lexical actualization, as part of the linguistic material that must be retrieved and selected in the process of message production. At the same time, as has been demonstrated by the variationist studies, the lexical

component is permeable to social variation. The objective of this paper is to study in what way the social component, and especially gender variation, is expressed in lexical selection depending on oral or written lexical production. The methodology of lexical retrieval used to this end arises from the studies of lexical availability: the available lexicon is that vocabulary which most easily comes to the speakers' minds in relation to a specific topic (Micheá 1953; Gougenheim, Michéa, Sauvageot & Rivenc 1964; López Morales 1995, 1999; Carcedo 1998; Samper, Bellón & Samper Hernández 2003). It makes it possible to observe the production of words in both modalities, isolating to a certain extent the lexical component from external factors.

1.1 Lexical availability and change in production channel

For the past few decades, an international project has been carried out with the aim of compiling the lexical availability of different Hispanic communities. The instrumental method that the *Proyecto Panhispánico* uses is a written semantic fluency test in which the informants have to produce all the words they know about a specific topic for two minutes, for example, *Animals*. The words produced are processed in a database on the Internet (www.dispoplex.com) and lists are obtained in which the words appear ordered according to an availability index, a numerical value that reflects the ease with which each word is produced by weighting the number of times that it appears in the list and the position that it occupies.

Although the classic methodology of lexical availability uses written tests, recently data collection has been carried out using the oral modality, due to motor, cognitive or educational determining factors which certain groups of informants possess. On the one hand, there are research projects with subjects of advanced age: Terrádez combines oral and written tests for subjects over 60 years old (1996, in Samper Padilla & Samper Hernández 2006: 36 and Gómez Molina & Gómez Devís 2004); see also Urrutia (2001), Borrego (2002) and Borrego & Fernández Juncal (2002). Oral tests have also been used for child lexical availability, in participants whose level of ability in writing skills does not allow for a traditional method of data collection: preschool children in Costa Rica (Sánchez Corrales & Murillo 2006) and Valencian children in the research presently being carried out by M^a Begoña Gómez Devís.

Studies that assess the impact of change of modality on lexical responses are, however, very scarce. García Marcos (in Mateo 1998: 81)

points out that in general there are no substantial differences between the two methodologies, without providing specific data. Hernández Muñoz (2006: 108–121) carried out a detailed study with informants from the same community in which that author concluded that although production did not vary in terms of the number of words actualized, according to the statistical tests, the qualitative variation is worthy of consideration.

These last results and the increase in research projects using oral methodology have led to a new series of research projects that attempt to deal with the implications of this change in methodology in the collection of lexical availability from different perspectives (cognitive, social); on this occasion, we focus on the interferences produced by the social variation in the change of modality.

1.2 The ‘gender’ variable in studies of availability

The ‘gender’ factor forms part of the set of social variables said to have an effect on the variation in lexical availability (Samper Padilla & Samper Hernández 2006: 46–54; Gómez Molina 2006). Whereas in the quantitative aspect the different studies offer diverse results, in the qualitative aspect almost all of them agree that this factor is differentiating, especially in the centres of interest where the cultural peculiarities dependent on gender are manifested.

The bibliography on language and gender also provides significant differences in regard to peculiarities in the lexical selection of both groups (in English, Poynton 1990; Tannen 1994; Holmes & Meyerhoff 2003; Coates 2004; in Spanish, García Mouton 2003) owing to either to the linguistic performance derived from the sociocultural or educational functions (Gray 1992) or to the biological dimension, for example, in the different evolution of psycholinguistic characteristics, such as different modes of categorizing and cognitive-linguistic development (Halpern 2002).

The objective of this contribution is not so much to study the lexical production of men and women in the oral tests in an isolated fashion, but to assess their performance in regard to the influence of a change in lexical modality. This approach is closer to the latest tendencies in gender studies, defined by Coates (2004: 6) as “the social constructionist perspective” in which gender is a social construct in which the individuals “do gender more than be gender”. In this way, in our study the participants construct

their lexical identity by adopting to a greater or lesser degree the flexible peculiarities of the two modalities of production.

Nevertheless, regarding the experimental collection of data, a further question arises: how is lexical production related to social constructivism that depends on the contextual linguistic use? At this point, cognitive linguistics theories about categorization and construction of mental lexicon allow linking successfully both phenomena. The categorial test shows how each social group conceives semantic categories. Human categorization, that allows communication, is based on common experiences of individuals from the same groups. It also reflects the way different cultural groups perceive and make sense of the world around (Lakoff 1987). Therefore, linguistic categorization, or lexicalization of certain semantic categories, varies according to different social groups such as gender or age. In addition to this, semantic links between words in mental lexicon are created and strengthened by frequency of use in real contexts; therefore, lexical production reflects latent use tendencies. So, study of lexical variation within categories could also be explained through cognitive linguistics and gender theories.

To sum up this section, given that the change in modality influences the lexical availability from the qualitative point of view, does it manifest itself equally in both genders? Are there groups that exhibit more the change in modality than others? Which group is more permeable to variation produced by changing the channel? Which cognitive factors promote social variation? The following sections are devoted to responding to these questions.

2. Methodology

The material employed to carry out this research came from tests of oral and written availability conducted with 60 students of the Faculty of Languages and Literature at the University of Salamanca: 30 oral (13 men and 17 women) and 30 written (9 men and 21 women).¹ The oral recordings were taken by two researchers from the lexical availability team of the Department of Spanish Language and the written questionnaires were collected in the regular classes for the students of Spanish Language

¹ The gender distribution of the sample shows the proportion of genders in the social context of data collection. I take on board the implication of the sample size and the lack of imbalance between groups for statistical description.

and Literature. None of the participants had previously taken an availability test, either oral or written. The traditional methodology was maintained with regard to the response time, but the number of *centres of interest* (topics or semantic fields) was reduced to six in order to facilitate collection of the oral material: *Parts of the Body*, *Clothing*, *Furniture*, *Animals*, *Professions* and *Intelligence*. The first five come from the sixteen traditional centres of interest. They were selected because they are semantic categories that exhibit a high degree of stability among social variables and possess a high degree of internal cohesion. The last centre of interest, *Intelligence*, does not form part of the classical centres of interest in the studies of lexical availability. It was introduced experimentally in the collection of data from Castilla-La Mancha (Hernández Muñoz 2004; Hernández Muñoz & Borrego Nieto 2004). It has been included mainly because of the information that it can provide with regard to the levels of language and the variation in the grammatical class of the words.

We now present, in summarized form, some data on the peculiarities of these centres of interest with regard to the ‘gender’ variable. A certain degree of uniformity can be observed in the general quantitative results, although in the last few studies there is a tendency for both genders to do better (in the sense of giving more exemplars) in the centres of interest that represent the contexts traditionally associated with them, for example, *Clothing* and *Furniture* in women. The women further seem to be more productive in *Professions* and the men in *Parts of the Body* (Gómez Molina 2006; Samper Padilla & Samper Hernández 2006: 46–54). Even so, these responses do not always coincide in all the studies; therefore we can only speak of general tendencies. With regard to the degree of *internal cohesion*² of each of the centres of interest it was found that in *Body Parts* and *Clothing* both groups exhibited the same level of *lexical coincidence* (a high percentage of similar words between groups); however, the women reached a higher degree of semantic similarity in *Animals* and the men in *Furniture and Professions* (Gómez Molina 2006: 61).

Aspects of cultural conditioning not only affect knowledge of a greater number of lexical elements, but also lexical preferences within each

² The index of cohesion gives us information about how compact or open a semantic category is and therefore, about the degree of coincidence in the subjects’ responses. It is obtained by dividing the average number of responses given by the informant by the number of different words. The maximum value is 1 and it means a complete coincidence in responses. The minimum value is 0 and it means that there are no common responses.

of the centres of interest. We thus enter into the area of qualitative differences. In the sections that follow, we will not attempt to carry out an exhaustive description of the phenomena that were found, but rather to present common lines of behaviour. For each of the lexical aspects considered below, we will begin with the centre of interest that offers the most possibilities for analysis.

To finish this section, we need to define the *features of orality* that are considered in the research. To do this, we have synthesized the characteristics that are dependent on the change of channel in lexical availability described in preceding studies (Hernández Muñoz 2006: 108–121; Hernández Muñoz in press):

- Changes in the availability of the register variants, primarily affected by the degree of formality.
- The abundance of free associations and chaining in the oral tests, giving rise to words that do not strictly belong to the category, such as brand names and words from different grammatical categories (adjectives and verbs).
- The abundance of enumerations of elements on a subordinated level and syntagmatic improvisations, which produce a great quantity of syntagmatic compounds.

3. Analysis

3.1 Brief quantitative description of oral results

Before beginning with a detailed analysis of the type of vocabulary actualized in the oral tests, some brief notes are in order about quantitative production in oral task. Tables 1 and 2 show the general results of the samples taken.

Student's t-tests were carried out for independent samples, one for each centre of interest and another for the total set of words. In none of the cases do significant statistical differences appear that could confirm the fact that men and women produce a different number of responses (in all the cases $p > 0.05$). This finding is in agreement with the results of the previous research in written tests (Hernández Muñoz 2006).

Table 1. General oral results (1)

	Centre of Interest	Total Words Tokens		Different Words Types	
		M	W	M	W
1	Body Parts	444	500	149	113
2	Clothing	344	465	147	161
3	Furniture	215	239	92	76
4	Animals	459	497	168	149
5	Professions	366	419	172	171
6	Intelligence	174	159	135	104

Table 2. General oral results (2)

	Centre of Interest	Arithmetic averages		Cohesion Index within groups (see footnote 2)	
		M	W	M	W
1	Body Parts	32.0	28.0	0.23	0.26
2	Clothing	26.4	26.6	0.18	0.17
3	Furniture	16.7	14.1	0.18	0.18
4	Animals	33.5	28.8	0.21	0.20
5	Professions	27.1	25.6	0.16	0.15
6	Intelligence	14.1	9.4	0.10	0.09

Table 2 reflects how both genders present some data that are even more similar in the cohesion indexes. In five of the categories, the cohesion index differs by 0.01, and in Clothing, the most differentiated category, the difference is only 0.03. This means that the categories are cognitive-lexical suprasociolectal entities with the same quantitative structure in both groups. These results partially agree with the affirmations of §2, where it was noted that the centre of interest Clothing had an equal distribution in both groups, whereas the women established more compact categories in Animals and the men in Furniture and Professions.

3.2 Quantitative analysis

3.2.1 Compatibility

The first step towards the study of the qualitative variation consists in obtaining the indexes of compatibility between the lexical sets, that is, taking into account how many lexical units they share. To do this, a calculation tool from www.dispoxlex.com was used. There are different ways of calculating the degree of compatibility, based on the amount of vocabulary for which the comparison is being established (Samper Padilla 1999; Bartol 2001). On this occasion, a stricter criterion was chosen for the materials presented: comparing the available words that come within 80% of the accumulated frequency.³ The 20% of the frequency that was discarded was composed of idiosyncratic terms given by only one informant.

In Table 3, the centre of interest exhibiting the greatest degree of compatibility is *Animals*, followed by *Body Parts*. These are also the most compact centres in general terms (*Body Parts*: 0.18; *Clothing*: 0.11; *Furniture*: 0.12; *Animals*: 0.16; *Professions*: 0.10; *Intelligence*: 0.06). *Intelligence*, the most dispersed area, is also the one that presents the lowest coincidence indexes; the two genders only share 20% of the terms.

It is interesting to observe, in addition, how many words remain in the lexical sets of each group. In all the centres of interest, the men produce more words which are not shared by the women, as can be seen in Table 4. For example, in *Body Parts* the women only have 3 words of their own, therefore, their contribution to the common set of terms constitutes 93.18% of their lexical store, whereas the men only share 56.16% of their available words. This difference can be observed especially in *Body Parts*, *Animals* and *Furniture*.

³ The other two solutions (comparing the first 100 words or those that obtained more than 0.02 of the availability rate) turned out to be broader parameters which made it possible to enter a large number of unique responses. It must be emphasized that this is due to the peculiarities of our reduced sample; on other occasions in which the number of informants and the number of different words are greater, the strictest criterion is to consider the first 100 words.

Table 3. Compatibility

Animals	62.11% (59 words)
Body Parts	53.95% (41 words)
Clothing	40.19% (43 words)
Professions	37.41% (52 words)
Furniture	37.29% (22 words)
Intelligence	20% (29 words)

Table 4. Words that are not shared

	Men	Women
Animals	28	8
Body Parts	32	3
Clothing	36	28
Professions	51	36
Furniture	28	9
Intelligence	72	44

This finding is related to a characteristic highlighted by other researchers: the availability indexes that the women obtain for the first words in their lists are higher and, therefore, their responses coincide more. Thus, in the sample considered here, the availability indexes of the first terms in the lists in the six centres of interest tend to be higher for the women, especially in centres of interest like *Furniture* or *Intelligence*. In the first case, the most available words for the women, *mesa* ‘table’ (0.916), *silla* ‘chair’ (0.828), *armario* ‘wardrobe’ (0.813) exceed 0.8, relatively close to 1, the maximum value that can be reached in the hypothetical case in which all of the speakers were to produce the same word in the first position. The men, however, do not reach this number: *silla* ‘table’ (0.726), *mesa* ‘table’ (0.696), *mesilla (de noche)* ‘bedside table’ (0.594). In the second centre of interest, the women’s list includes *cerebro* ‘brain’ (0.491), *sabiduría* ‘wisdom’ (0.406) and *memoria* ‘memory’ (0.316), and the men’s, *cerebro* ‘brain’ (0.418), *estudio* ‘studies’ (0.269) and *listo* ‘clever’ (0.220). Only one exception was found to this tendency, the word *profesor* ‘teacher’, the most available for both groups in *Professions*. In the men’s lists it obtains

an availability of 0.887 and in the women's list, 0.723. Nevertheless, the second most available term in this centre of interest, *médico* 'doctor', again exhibits a greater degree of coincidence in the female group (0.628) than in the male one (0.478).

3.2.2 Levels of language and gender

In a pioneering study, Borrego (2009) studied the diaphasic variation in the lists of lexical availability through the centre of interest *Body Parts*.⁴ What stands out in the study is that the change in written or oral modality affects the distribution of the variants that make up the synonymic or quasi-synonymic series that appeared in the available vocabularies (for example, *nariz* 'nose', *fosas nasales* 'nasal pit', *cavidad nasal* 'nasal cavity', *napias* 'conk'). In the oral tests a tendency was observed of presenting informal or spontaneous variants as a reference term of the series (the most available), whereas in the written tests the reference term is usually a neutral term with regard to the degree of formality, followed both by forms of a spontaneous or careless nature and the technical terms proper to the medical classroom. Here are a few examples:

Written: *abdomen* 'abdomen' (reference term), *vientre* 'belly', *barriga* 'tummy', *tripa* 'tummy', *panza* 'paunch', *mondongo* 'potbelly', *cavidad abdominal* 'abdominal cavity'

Oral: *barriga* 'tummy' (reference term), *abdomen* 'abdomen', *tripa* 'tummy', *vientre* 'belly'

In a study carried out in Aragón (Spain), Lagüéns (2008: 126) points out how men use a greater number of taboo words in *Body Parts* than do women. Also López Morales (2005), in his work about the sociolinguistics of the taboo, shows how young men favour the use of taboo terms.

⁴ This centre of interest is appropriate for the observation of this phenomenon because in it two layers of the lexical substratum are superimposed, the one acquired in a natural way and the one learned in school, so that all types of diastratic and diaphasic variation are condensed: from colloquial, taboo and transgressor words (*pija* 'cock', *nabo* 'dick', *ojete* 'asshole'), to technical terms (*bronquiolos* 'bronchioli', *metatarso* 'metatarsus'), whereas in between there is a rich grouping of understating and euphemistic forms (*trasero* 'bottom', *pompis* 'bum') and forms with pragmatic intention (humoristic *zarpa* 'paw'). British English has been used for translation of familiar and colloquial examples.

These results observed in the studies of lexical availability fit the patterns described in the classic works on language and gender which highlight that women use more standard forms than men (James 1996; Romaine 1998: 172; Coates 2004: 13–15, 61–62). Also, it has been observed how on some occasions the female group adopts a language removed from the standard in order to mark phases of rebellion in their social development (for example, the study from 1987 by Barbara Rich about the “dirty words” of young women [Romaine 1998: 100]).

With these precedents (the tendency to use informal variants in the first spots in the oral tests and the greater use of taboo words by the men) we will analyse the results in the most fruitful centres of interest in lexical groupings of this type: *Body Parts* and *Intelligence*. As a reference series for the written tests, for *Body Parts* we use those proposed by Borrego in the study cited, and for *Intelligence*, the data obtained from the research of Castilla-La Mancha (680 participants from central Spain). The place that the word occupies in the lists of availability will appear in parentheses.

Synonymic series on the part of the women:

a. Series in which the reference term varies with regard to the written test: *barriga* ‘tummy’ (41), *abdomen* ‘abdomen’ (49), *tripa* ‘tummy’ (61), *ventre* ‘belly’ (100).

Here the most colloquial terms are two that move up in the lists; *barriga* ‘tummy’ becomes the reference term in front of *abdomen* ‘abdomen’ and *ventre* ‘belly’, and *tripa* ‘tummy’ even comes before *ventre* ‘belly’.

b. Series in which the order presented in the written test is maintained: *barbilla* ‘chin’ (55), *mentón* ‘chin’ (87); *culo* ‘bottom’ (31), *glúteo* ‘gluteus’ (46), *trasero* ‘bum’ (77); *genitals* ‘genitals’ (92), *pubis* ‘pubis’ (110); *pelo* ‘hair’ (12), *cabello* ‘hair’ (67); *tronco* ‘trunk’ (22), *torso* ‘torso’ (50), *tórax* ‘thorax’ (64).

As indicated by Borrego (in press) some of the series in which the change in channel does not affect the selection of the most spontaneous variants could be the ones in which more difficulties arise when considering the terms to be synonymic and therefore, they depend more on the meaning that the speakers give to them than on the contextual variation.

c. Reduced series in which only the reference term appears:

axilas ‘armpit’ (106);

pechos ‘breasts’ (93);

rabadilla ‘tailbone’ (109).

In all of them, the form is selected that appears as a reference term in the written tests, representative of neutral variants or those close to a formal use of the language. It is worthy of mention how in the women’s lists there are fewer words that refer to tabooed elements, both in the case of colloquial variants (*tetas* ‘tits’) and formal ones (*vagina* ‘vagina’ or *pene* ‘penis’).

Synonymic series on the part of the men:

a. Series in which the reference term varies with regard to the written tests:

barriga ‘tummy’ (38), *vientre* ‘belly’ (67), *abdomen* ‘abdomen’ (85), *tripa* ‘tummy’ (132);

chocho ‘cunt’ (70), *vagina* ‘vagina’ (106);

pito ‘willy’ (75), *pene* ‘penis’ (79);

tetas ‘tits’ (41), *pechos* ‘breasts’ (76).

b. Series in which the order presented in the written test is maintained:

axila ‘armpit’ (56), *sobaco* ‘armpit’ (94);

barbilla ‘chin’ (61), *mentón* ‘chin’ (110);

culo ‘bottom’ (34), *nalgas* ‘buttocks’ (68), *glúteo* ‘gluteus’ (138);⁵

mejillas ‘cheeks’ (63), *carrillos* ‘cheeks’ (108);

tronco ‘trunk’ (14), *torso* ‘torso’ (103), *tórax* ‘thorax’ (105).

c. Reduced series in which only the reference term appears:

coxis ‘coccyx’ (122);

genitals ‘genitals’ (43).

In general, the group in which the greatest variation occurred between the sociolects is in that of the series that varies according to the channel (a). As for the men, the number of alterations in the order of presentation of the

⁵ With regard to this series, it must be pointed out that in the results of the 30 written tests of the students in the Faculty of Language and Literature, the men’s tendency to use the formal variants is even more noticeable: *glúteo* ‘gluteus’ (23), *culo* ‘bottom’ (36).

lexical variants increases. These alterations occur in the taboo words that do not appear in the women's list (*pene* 'penis', *vagina* 'vagina'). Likewise, there is a certain consistency in the groups of terms in which the order presented in the written test is maintained (b). And, finally, the cases in which only one reference term appears are variants close to medical terminology (c).

If it is true that women use fewer informal or careless terms, it could be due mainly to two factors, that the informal words are really less available for the female gender or that they view the availability test as a linguistic task with a greater degree of formality which leads them to limit production of a colloquial or spontaneous nature.

The second centre of interest studied is *Intelligence*. In this case, the change in channel caused not only variation in the degree of availability of the variants dependent on the register, but also alternation of lexical forms. Due to the abstract nature of this semantic category, it is necessary that the method prevalent in lexical studies is complemented by a deeper subsequent cognitive linguistic analysis.

In general terms, the males exhibited a tendency to give more variety of synonyms of the type *cerebro* 'brain' (1), *masa gris* 'grey matter' (19); the females usually only give the formal term *cerebro* 'brain' (1). In order to consider the levels of language, a set of specific terms was selected: adjectives which assess the degree of intelligence.

Women:

listo 'clever' (5), *sabio* 'wise' (19), *erudito* 'erudite' (30), *superdotado* 'highly gifted' (41), *avisgado* 'sharp' (76), *sabelotodo* 'wiseass' (95), *discreto* 'discreet' (100);
subnormal 'moronic' (47), *tonto* 'dumb' (48), *idiota* 'idiot' (83), *estúpido* 'stupid' (92).

Men:

listo 'clever' (3), *superdotado* 'highly gifted' (6), *despierto* 'bright' (17), *ágil* 'quick' (32), *cerebrito* 'brainiac' (39), *astuto* 'shrewd' (57), *empollón* 'swot' (88), *hábil* 'skillful' (93), *clarividente* 'clear sighted' (98);
tonto 'dumb' (5), *deficiente* 'mentally handicapped' (40), *retrasado* 'retarded' (53), *subnormal* 'moronic' (72), *discapacitado* 'disabled' (86).

Diverse aspects can be highlighted in this series. In the first place, the negative terms given by the men are present starting at the first positions in

the lists, whereas in the female production they appear beginning at position 47. In addition, in the female lists an alternation of the base term occurs. The form *tonto* 'dumb' from the written series is surpassed by *subnormal* 'moronic', which obtains a higher availability index. Even so, if we take into account the frequency of the appearance of both terms, *tonto* 'dumb' 11.7% and *subnormal* 'moronic' 5.8%, the first one was stated twice, whereas the second only once, but in priority places on the lists, for which reason it obtains a higher availability index. In any case, the negative terms given by the women are marginal, in contrast to what happens in the men's count.

Another important aspect is the fact that the two genders only share four lexical units, two of them corresponding to positive attributes, *listo* 'clever' and *superdotado* 'highly gifted' and two negative ones, *tonto* 'dumb' and *subnormal* 'moronic'. The rest of the qualifying adjectives are not common to both lexical repertoires. In the women's available adjectives we observed a predilection for educated variants in the initial positions (*sabio* 'wise', *erudito* 'erudite') or variants that involve nuances of personality of a general nature (*discreto* 'discreet') or with a mildly pejorative meaning (*idiota* 'idiot' or *estúpido* 'stupid'). The men, however, use adjectives focused on problem-solving (*hábil* 'skillful', *astuto* 'shrewd', *ágil* 'quick', *despierto* 'bright') or very pejoratively marked (*retrasado* 'retarded', *deficiente* 'mentally handicapped').

It is very interesting to confirm these observations in other studies that involve the use of formal variants in contexts of lesser experimental rigour than availability tests. Romaine (2003: 99) argued that most of the studies that afford this issue are in pronunciation and regional variation, but this principle could be extended to other linguistic levels as grammar or lexical selection, or even to pragmatics, conversational interaction or choice of language by bilinguals.

Moreover, this finding seems to harmonize with sociolinguistic cross-linguistic studies. The same patterns of linguistic behaviour have been found in different languages and cultures. Peter Trudgill (1972) finds a similar behaviour in British English of Norwich & Gordon (1997) in English from New Zealand. The conservative tendency of women is not limited to urban, industrial or western societies. Vast areas of the Near East and South Asia show conservative variants such as the use of retroflex consonants in careful speech Taiwanese mandarin (Labov 2001). In the same way, Abu-Haidar (1989) concluded that in Baghdadi Arabic, women are more conscious of prestige than men are, Haeri (1997) reports the same

results for the linguistic behaviour of Cairo and Mardijono and Junarto (2007) collected the non-standard expressions used more by men than women in Indonesian.

Why do many women tend to use a higher proportion of the standard variants than men? A quite vast amount of explanations has been proposed (for a brief summary, see Cheshire [2002]). Fasold (1990) argued that “women use a higher proportion of standard variations because this allows them to sound less local and to have a voice with which therefore to protest against the traditional norms”. Likewise, Trudgill (1972) pointed out that “women have to acquire social status vicariously, whereas men can acquire it through their occupational status and earning power”.

On the other hand, a social constructionism approach incorporates a dynamic conception of gender because lexical items can add certain social significance, becoming associated with all the culturally-recognized attributes of the social groups (Eckert 1990, Cheshire 2002). Although experimental lexical selection is not integrated in a discourse, lexical items keep the potential social significance to be developed in discourse. If a variant is socially associated with the ideas of femininity, women tend to produce this word more frequently in the lexical fluency tasks, in terms of frequency of use.

3.2.3 Lexicological peculiarities

Next, we will describe the lexicological peculiarities that were found in the two oral repertoires available and which were summarized in the methodology.

a. Brand names

It was found that the oral tests promoted the appearance of brand names. It was seen that this is the case, especially in the centre of interest *Clothing*. However, they occur sporadically in *Clothing* in both groups, since in all cases it is a matter of idiosyncratic lexical units, caused by a single informant in each group.

Women (0.4 per informant): *Levis, Stradivarius, Zara, Mango, Benetton, Pull and Bear, Bershka*.

Men (0.85 per informant): *Dolce & Gabbana, Emporio Armani, Pull and Bear, H & M, Terranova, Levis, Zara, Promod, Cortefiel, Versace, Sfera.*

b. Words from other grammatical categories

In the centres of interest *Body Parts, Animals* and *Professions*, all the terms recorded are nouns. These semantic categories are the most compact, with high indexes of cohesion and more defined limits and which, in addition, admit fewer free associations (see §6.4). However, in the results of the three remaining categories, the men gave a greater number of nouns and verbs than the women, as shown in Table 5. In this quantification and in the following ones, due to the difference between the number of men and women (17 women and 13 men) the results are presented with averages in parentheses.

Table 5. Verbs and adjectives

	Men		Women	
	Adjectives	Verbs	Adjectives	Verbs
Clothing	16 (1.23)	5 (0.38)	1 (0.06)	0
Furniture	2 (0.15)	0	0	0
Intelligence	25 (1.92)	14 (1.08)	14 (0.82)	9 (0.53)
Total	43 (3.31)	19 (1.46)	15 (0.88)	9 (0.53)

Whereas in the written tests the production of words from grammatical categories other than nouns is almost non-existent (one adjective given by one woman, *salvaje* ‘wild’), in the oral tests this increases considerably, especially due to the contributions of the male participants.

c. Improvisations or syntagmatic compounds

Another of the characteristics of the oral tests is that the number of syntagmatic compounds whose nucleus is a noun (*oso* ‘bear’, *oso pardo* ‘grizzly’, *oso polar* ‘polar bear’; *ropa de boda* ‘wedding clothes’, *ropa de fiesta* ‘partying clothes’, *ropa de communion* ‘first communion clothes’) increases. In the written tests, both groups obtained a general average of 2.3 syntagmatic compounds per participant. As shown in table 6, both social groups increase production of this type of compound lexical item in very

similar proportions (7.15 for the men and 7 for the women). Even so, in the oral tests it was observed that each gender tends to create a greater number of lexical improvisations in specific centres of interest, those in which they reach greater productivity. The women are the creators of most of the compound terms in *Clothing* (*piercing* ‘piercing’, *piercing en la lengua* ‘tongue piercing’, *piercing en el ombligo* ‘belly button piercing’), whereas the men are more creative in *Furniture* (*muebles de baño* ‘bathroom furniture’, *muebles para los zapatos* ‘shoe cabinet’, *muebles de un color* ‘one colored furniture’, *mueble de carpintero* ‘handcrafted furniture’).

Table 6. Syntagmatic improvisations

	Men	Women
Body Parts	8 (0.61)	9 (0.53)
Clothing	18 (1.38)	56 (3.29)
Furniture	29 (2.23)	16 (0.94)
Animals	4 (0.31)	6 (0.35)
Professions	24 (1.85)	25 (1.47)
Intelligence	10 (0.78)	7 (0.41)
Total	93 (7.15)	119 (7)

d. Free associates

The final feature of orality in this section is the increase in free associates and of the consequent chainings, which results in the inclusion of words which do not directly belong to the category, but rather are relational associates more or less distant from the thematic nucleus. In Table 7, associates appear in only two categories, *Clothes*⁶ and *Furniture*, and in both cases the men are the more productive group. In this count, the centre of interest *Intelligence* was omitted due to its structure as an open relational category, which made it difficult in the extreme to consider what elements belonged to the categorial nucleus or not. This is perhaps the most variable phenomenon with regard to the written tests, in which the men did not produce any free associates, and the women produced an average of 0.95

⁶ We also consider as belonging to this category the parts of items of clothing such as *mangas* ‘sleeves’, *perneras* ‘legs’, *cuello* ‘collar’, *cremalleras* ‘zips’, and the linens used in the home such as *toallas* ‘towels’ and *sábanas* ‘sheets’.

per participant. Whereas the women reduce the number of free associates (0.23), the men increase their number significantly (2.85).

Table 7. Free associates

	Men	Women
Clothing	35 (2.69)	4 (0.23)
Furniture	2 (0.15)	0
Total	37 (2.85)	4 (0.23)

Most of the lexical peculiarities which we are considering are related to each other: the brand names, the syntagmatic improvisations and the presence of adjectives and verbs directly reflect the increase in words distant from the category. However, the two genders have not responded equally to all of them. In some, such as the brand names or the syntagmatic compounds, the men and the women exhibit similar linguistic behaviour. The brand names are relegated to sporadic productions without sociolectal entity, and the equality in the syntagmatic improvisations means that it is more a matter of a production strategy fostered by oral fluency without social markings. However, there are other lexical aspects such as free associates or words from other grammatical categories that reflect some patterns of different linguistic behaviour.

This linguistic behaviour may have several explanations. On the one hand, we could conclude that the processes of categorization are more specific in the group of women. This would justify the concurrence of the female responses and the lack of intrusion (interference) of words that are outside both the semantic and the grammatical category. This is what is suggested by authors such as Vygotsky or Robin Lakoff, who consider that being female allows a different way of categorizing from the male (Gómez Molina 2006: 51), perhaps not only on the conceptual plane, but also in the formal and linguistic manifestation of the concepts. On the other hand, it could be that the results are related to each other and respond, not to a cognitive pattern, but rather to one of an attitudinal nature: the women have more respect for the methodological limits of the task that has been given to them and therefore, despite the change in modality, they preserve the formal nature of the test. This final point would appear to be in accordance with the two theories about gender. In the first, Coates (1999) proposes how women show different linguistic behaviour depending on whether they find themselves *backstage* (a more relaxed, more off-record context) or

frontstage (a public context). In the second they always respect the norms of femininity in a more obvious way. The second theory comes from social psychology (Meyerhoff 1996) and explains how women seem to make an affective assessment of the situation or task that they are involved in and therefore, some of them tend to carry them out with more care and attention. These two points of view explain why in the availability task, a formal task carried out in an academic framework, they adjust better to the patterns of standard language and to the limits of the proposed activity.

Should these explanations be valid, it would become patently clear that men favour the features of orality in lexical availability, both from the point of view of formal characteristics (word classes), and in variants dependent on register.

4. Conclusions

Below we summarize the most important conclusions derived from the materials presented and which respond to the questions posed in §1.2.

(1) The linguistic behaviour of the men and women when faced with a change in modality in the tests on lexical availability changed in different aspects and with different intensities.

(2) The statistical analyses confirm that there are no quantitative differences between the production of the men and women in the oral tests. A certain sociolectal consistency does exist in the averages of the responses and in the cohesion indexes obtained in each centre of interest.

(3) Whereas there are lexical aspects typical of the strategies of oral production which manifest themselves with equal intensity in both linguistic varieties (the increases in syntagmatic improvisations or the pronounced inclusion of brand names), there are other features which show a clear group tendency.

(4) The male group seems to be more susceptible to the features that characterize the lexical availability obtained through the oral tests. These differences can be articulated in mainly three aspects: (a) interaction of the diastratic and diaphasic variants; a decrease in the degree of formality in the terms at the top of the series of synonymic words; and the increase in reference to taboo elements; (b) an increase in associated words external to the category; (c) an increase in the classes of less common words, such as adjectives or verbs. The finding (a) agrees strongly with previous cross-linguistic studies from a social cognitive linguistics point of view.

(5) These findings could be due to diverse factors: to changes in the cognitive linguistic determinants of the categorical construction of men and women or to a group attitude determined by being faced with this kind of test, typical of each gender's way of constructing itself socially and linguistically. Meaning construction and semantic space depend on the embodied characteristics of the individuals. This semantic and lexical space is dynamic and accounts for environment differences as social differences could be.

(6) Not all the centres of interest exhibit that change in the channel of production equally. Some centres are more appropriate for observing certain parts of the variation: *Clothing* is the category in which the changes in modality were most pronounced with regard to stretching the limits of the semantic and grammatical categories. *Body Parts*, very stable in these last aspects, exhibits the greatest number of diaphasic variants. *Professions* and *Animals*, however, exhibit a high degree of stability in all ways. The open nature of *Intelligence* makes this centre of interest very advantageous for observing the overall variation.

In conclusion, the objective of this study, to observe the interaction between the variation that depends on the change in channel and that provided by the sociolinguistic variable 'gender', has been achieved in part. Even so, all of these conclusions are to a certain degree of a provisional nature, mainly since a limited sample of subjects and semantic categories was worked with. Nevertheless, from a methodological point of view, they are very valuable for future research both in lexical availability and lexical variation studies.

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