The Development of Spanish Sibilants

1. Old Spanish

Old Spanish was based on the dialect of Vulgar Latin spoken in the plains north of Burgos. This was one of the areas not under Islamic rule during the Middle Ages. This northern Castilian dialect was considered rather provincial and non-prestigious during Roman times, where the prestige urban dialects were centered around Sevilla (in Andalucia). However, since most of Spain fell under Islamic rule, the Andalucian Romance language co-existed with Arabic, where it was known as Mozarabe (and was written with an Arabic orthography). The history of Spanish is closely connected with the spread of Castilian Spanish south during the reconquest; during that period speakers of Arabic and Mozarabe adopted Castilian, but with certain modifications. One area where Andalucian Spanish and Castilian differ is in the reflexes of the Old Spanish sibilant system. During the Old Spanish period (13th-15th century) Castilian had six sibilant phonemes:

<table>
<thead>
<tr>
<th>phoneme</th>
<th>orthography</th>
<th>examples</th>
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</thead>
<tbody>
<tr>
<td>dentals</td>
<td>voiceless</td>
<td>/tʃ/ &gt; /ʃ/</td>
</tr>
<tr>
<td></td>
<td>(affricates)</td>
<td>/tʃts/</td>
</tr>
<tr>
<td></td>
<td>/dʒ/ &gt; /ʒ/</td>
<td>z</td>
</tr>
<tr>
<td></td>
<td>voiced</td>
<td>/tʃts/</td>
</tr>
<tr>
<td></td>
<td>/dʒis/</td>
<td>pozø /poʃo/ ‘well’</td>
</tr>
<tr>
<td>apico-alveolars</td>
<td>voiceless</td>
<td>/s/</td>
</tr>
<tr>
<td></td>
<td>(fricatives)</td>
<td>/sʃ/</td>
</tr>
<tr>
<td></td>
<td>voiced</td>
<td>/ʃ/</td>
</tr>
<tr>
<td></td>
<td>/ʒ/</td>
<td>espeso /eʃpeʃo/ ‘spent’</td>
</tr>
<tr>
<td>palato-alveolars</td>
<td>voiceless</td>
<td>/ʃ/</td>
</tr>
<tr>
<td></td>
<td>(fricatives)</td>
<td>/ʃʃ/</td>
</tr>
<tr>
<td></td>
<td>voiced</td>
<td>/ʒ/</td>
</tr>
<tr>
<td></td>
<td>/ʒʃ/</td>
<td>mugier /muʒiʃo/ ‘woman’</td>
</tr>
</tbody>
</table>

The dentals probably began as affricates (/tʃts/ and /dʒis/) and were weakened to corresponding fricatives (/ʃ/ and /ʒ/). It is unclear exactly when this happened, but it is often assumed that this change was complete by the end of the Middle Ages. On the other hand, there is evidence that the affricates persisted into the 16th century, as the letter ç was used by 16th century missionaries in Mexico to transcribe the Nahuatl phoneme /tʃts/. It is probable that the affricates and fricatives existed as free variants for a time during the 16th century, before evolving definitively into fricatives. The apico-alveolar fricative /s/ was probably similar to what one hears in modern Castilian Spanish (also, in certain Midwestern dialects of English). It gives the impression of being almost an ‘sh’ sound. Old Spanish also had a voiced version of this (/ʃ/).
2. Voice Leveling

The first major change that the system in (1) underwent began in Northern Spain and spread south. This change leveled the voicing distinction; i.e., it collapsed the voiceless/voiced pairs into single voiceless phonemes:

(2) voice leveling:  
\[
\begin{align*}
/z/ & \rightarrow /ç/ \\
/z/ & \rightarrow /S/ \\
/ž/ & \rightarrow /š/ \\
/ž/ & \rightarrow /S/
\end{align*}
\]

This may have been the case in the far North during the Old Spanish period, perhaps because of Basque influence. When Madrid became the capital in the 1560s, large numbers of Northerners settled in the central region, and this change began to spread south. The result of this change was a three sibilant system:

(3)  
- voiceless dental fricative  
\[
/š/ \quad c, ç, z
\]
- voiceless apico-alveolars  
\[
/S/ \quad s
\]
- voiceless palato-alveolars  
\[
/š/ \quad x, j, g
\]

Note that this leveling creates homonyms; there no longer is a distinct pronunciation between what was written c/c and what was written z.

There are two pieces of evidence for this change:

- Spelling errors: Such errors are found in the writings of Santa Teresa (1512), e.g., reçar instead of rezar (‘pray’) and teoloxia instead of teologia (‘theology’).

- A comment made by Fray Juan de Córdoba, published in Mexico in 1578, but referring to the situation in Spain decades earlier:

  "Los de Castilla la Vieja dizen haçer y en Toledo hazer, (los de Castilla la Vieja) dizen xugar, y en Toledo (dizen) jugar."

  ‘Those from Old Castile say /açer/ and in Toledo /azer/, (those from Old Castile) say /šugar/, and in Toledo (they say) /žugar/.’

This quote also provides evidence that voice leveling began in the North (Castilla la Vieja) and had not reached Toledo (Central Spain) by the mid-16th century.
3. Changes in Point of Articulation

Both the Old Spanish system and the system that resulted from voice leveling placed a rather heavy functional load on the coronal points of articulation. For example, there was quite a bit of acoustic similarity between /kasə/ ‘hunt’, /kaSa/ ‘house’, and /kaša/ ‘box’. This was resolved in two ways: one was to merge the dentals and alveolars; the other way was to spread out the points of articulation to alleviate the functional load. These different strategies are behind a major dialect division in the Spanish speaking world.

3.1. Andalucia and the Americas - Merger

Castilians began the reconquest of Spain as Old Spanish was developing. Toledo became Castilian in 1086, Sevilla in the 13th century, and finally Granada in 1492. As Castilian Spanish spread south, it underwent changes distinct from those in the North. Recall that the voice leveling did not occur in Andalucia until the 17th century. This means that in the early 16th century Andalucian Spanish retained essentially the Old Spanish six-sibilant system. However, during the 16th century, the distinction between the dental and alveolar sibilants was lost. This merger was realized in two ways. The more prestigious dialects, centered around Sevilla, Córdoba, and from there into the Canaries and Americas, merged the dental and alveolar fricatives into alveolar fricatives, but of a variety similar to what we have in English (i.e., not the apico-alveolar /S/ found in Castilian). At this point, the palato-alveolars remained the same.

(4) Merger (prestige dialect): 

The system in (4) represented the standard dialect in the South, as well as in the Americas. Jewish speakers of this dialect were expelled from Spain in the 16th century; as a result, this is essentially the system found in Judeo-Spanish dialects today (e.g. Ladino). At this point there is still a voice distinction between /kasa/ ‘hunt’ and /kaza/ ‘house’, but the point of articulation is the same.

Evidence for this change again comes from spelling errors. Since there is no phonemic distinction between orthographic ç and ss (both /s/), nor between z and s (both /z/), writers of the time commented on spelling errors that substituted ç for ss (e.g. paço instead of passo ‘step’). This type of spelling error was called çêçeo; i.e., abuse of the orthographic letter ç. Similarly, writers commented on the ‘abuse’ of orthographic z (instead of s), e.g. caza instead of casa ‘house’. This practice was called zezeo. Note that the terms çêçeo and zezeo refer to spelling errors, and not to pronunciation per se. Nevertheless, these errors are indicative that the phonemic contrasts had been lost.

In some rural and costal areas, the merger took a slightly different form, resulting in dental fricatives that were nearly inter-dental in their point of articulation:
Merger (rural dialects): 

\[
\begin{array}{cccccc}
/s/ & /S/ & /z/ & /\tilde{z}/ & /\tilde{s}/ & /\tilde{z}/ \\
/\theta/ & /\tilde{\theta}/ & /\tilde{s}/ & /\tilde{z}/ \\
\end{array}
\]

When the voice leveling finally reached Andalucia, the result was a two phoneme system of sibilants. The result was somewhat different in the two dialects of Andalucian Spanish:

Voice leveling: 
(7) 
(prestige ‘seseo’ dialect) 

\[
\begin{array}{cccc}
/s/ & /\tilde{s}/ & /\tilde{z}/ & /\tilde{z}/ \\
/s/ & /\tilde{s}/ & /\tilde{z}/ & /\tilde{z}/ \\
\end{array}
\]

Voice leveling: 
(8) 
(rural ‘ceceo’ dialect) 

\[
\begin{array}{cccc}
/\theta/ & /\tilde{\theta}/ & /\tilde{s}/ & /\tilde{z}/ \\
/\theta/ & /\tilde{\theta}/ & /\tilde{s}/ & /\tilde{z}/ \\
\end{array}
\]

The terms seseo and ceceo are used to distinguish these dialects. Note that these terms, unlike the earlier çeçeo and zezeo, refer to pronunciation, not to spelling. Today the seseo dialect is the prestige dialect in Andalucia (e.g. the former president of Spain, Felipe González, is a seseísta) and Latin America. The ceceo dialect is quite stigmatized. Most ceceístas alternate between /\theta/ and /s/ in free variation. There is one difference between the systems in (7-8) and their modern versions, however; the palato-alveolar /\tilde{s}/ is today realized as /h/ (sometimes /x/). This is due to a change that, again, began in Northern Spain, and will be discussed below.

3.2. Castilian - Spreading the Points of Articulation

After the voice merger in Castilian Spanish, there was a three-sibilant system (/s/, /S/, /\tilde{s}/). As mentioned above, this put a heavy functional load on coronal fricatives. Around the late 16th century this situation was alleviated by exaggerating the point of articulation distinctions between these phonemes. This involved moving /s/ forward and moving /\tilde{s}/ back:

Castilian point of articulation shift: 

\[
\begin{array}{cccc}
/\tilde{s}/ > /\theta/ & /s/ & /S/ & /\tilde{s}/ \\
/\tilde{s}/ > /x/ & /\tilde{s}/ & /\tilde{z}/ & /\tilde{z}/ \\
/\theta/ & /S/ & /x/ & /x/ \\
\end{array}
\]

Now caça ‘hunt’, casa ‘house’, and caxa ‘box’ are easily distinguishable, being pronounced /ka\theta/ /kaSa/, and /kaxa/ respectively. This is the sibilant system of modern Castilian Spanish. Although this change began in the late 16th century, it wasn’t complete until the mid-17th century. In particular, educated speakers retained /\tilde{s}/ longer, as evidenced by the fact that Cervantes’ Don Quixote was transliterated into French and Italian as Don Quichotte and Don Chisciotto respectively.
In Andalucia and Latin America (which by now had been colonized for nearly 100 years), the merger had already taken place, hence, the shift from /š/ to /θ/ didn’t take place. However, the shift of the palato-alveolar to the velar region did spread south, although in a slightly different form; these dialects favored a glottal articulation of this phoneme. This change reached the south (and the Americas) by the late 17th century:

(10) **Andalucian point of articulation shift:** /š/ > /h/  
    /š/ /h/  
    /θ/ /θ/  
    /θ/ /h/  

We see evidence for this shift in the name of a type of fortified wine from the town of Xérès. This town was called /šeres/ (or /šereθ/ in the local ceceísta dialect) before the change in (10). Thus, when this wine was exported to England, it was known as *sherries*, then later *sherry*. The town is now pronounced /heres/ or /hereθ/ (now spelled *Jerez*), which is what the wine is called in Spain today.

4. **Summary**

The changes in the sibilant system are summarized in the following charts - one for the seseísta dialect of Andalucia and Latin America, and the other for Castilian Spanish:

(11) **Andalucian and Latin American:**  

<table>
<thead>
<tr>
<th>seseísta</th>
<th>/š/</th>
<th>/S/</th>
<th>/ž/</th>
<th>/Z/</th>
<th>/š/</th>
<th>/ž/</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merger (16th cent.)</td>
<td>/š/</td>
<td>/ž/</td>
<td>/š/</td>
<td>/ž/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voice leveling (late 16th cent.)</td>
<td>/š/</td>
<td>/ž/</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Point of Articulation Shift (late 17th cent.)</td>
<td>/š/</td>
<td>/h/</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(12) **Castilian:**  

<table>
<thead>
<tr>
<th>/š/</th>
<th>/ž/</th>
<th>/S/</th>
<th>/Z/</th>
<th>/š/</th>
<th>/ž/</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voice leveling (early 16th cent.)</td>
<td>/š/</td>
<td>/S/</td>
<td>/š/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Point of Articulation Shift (late 16th cent.)</td>
<td>/θ/</td>
<td>/S/</td>
<td>/x/</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
After the spelling reform in the 18th century eliminated the letters ç, ss, and x, the orthography made distinctions necessary for the Castilian system, but more distinctions than are required for seseísta (and ceceísta) dialects:

<table>
<thead>
<tr>
<th>orthography</th>
<th>Castilian</th>
<th>Seseísta</th>
<th>Ceceísta</th>
</tr>
</thead>
<tbody>
<tr>
<td>c, z</td>
<td>/θ/</td>
<td>/s/</td>
<td>/θ/</td>
</tr>
<tr>
<td>e.g.</td>
<td>decir ‘say’</td>
<td>/θeθir/</td>
<td>/theta/</td>
</tr>
<tr>
<td>caza ‘hunt’</td>
<td>/θaθa/</td>
<td>/θasa/</td>
<td>/θaθa/</td>
</tr>
<tr>
<td>s</td>
<td>/S/</td>
<td>/s/</td>
<td>/θ/</td>
</tr>
<tr>
<td>e.g.</td>
<td>casa ‘house’</td>
<td>/θaθa/</td>
<td>/θasa/</td>
</tr>
<tr>
<td>g, j</td>
<td>/x/</td>
<td>/h/</td>
<td>/h/</td>
</tr>
<tr>
<td>e.g.</td>
<td>gente ‘people’</td>
<td>/θente/</td>
<td>/hente/</td>
</tr>
<tr>
<td>caja ‘box’</td>
<td>/θaxa/</td>
<td>/θaha/</td>
<td>/θaha/</td>
</tr>
</tbody>
</table>

Because the orthographic distinction between z and s does not correspond to a phonemic contrast in seseísta dialects, spelling errors are common (e.g. empiesa instead of empieza ‘begin’). Conversely, writers who wish to parody lower-class ceceísta speakers will commonly use an orthographic z instead of s to indicate an inter-dental point of articulation (e.g. zoy zembrando instead of soy sembrando ‘I am sowing’).

5. Recent Change

There is one relatively recent change that has effected Andalucian and some American dialects. Sometime around the 19th century, Andalucian speakers began to aspirate syllable-final silibants:

\[(14) \quad /s/ \rightarrow [h] / \_ \_ . \quad (seseíasta) \quad /θ/ \rightarrow [h] / \_ \_ . \quad (ceceíasta)\]

The result of this change can be seen in words like estòs [éθtθ] ‘these’. This change appears to have spread from Andalucia to the Canaries and areas of Latin America that maintained contact with Andalucia until the late 19th century; e.g. the Caribbean, and other Atlantic Coastal areas. This gave rise to a current dialect distinction in Latin America: non-coastal areas that lack this change (e.g. most of Mexico, Colombia, etc.) versus coastal areas that have it (e.g. the Caribbean, Argentina, etc.).