SOME PHONOLOGICAL CHANGES IN MALTESE REFLECTED IN ONOMASTICS

Andrei A. Avram*

Abstract: The present paper evaluates the onomastic evidence for some of the changes affecting consonants in the history of Maltese. The analysis is based on a rich corpus of surnames, nicknames and place-names recorded between early 15th century and late 18th century. Onomastics is shown to offer valuable insights into the gradual emergence of the system of consonantal phonemes of Modern Maltese and of some of its specific phonological rules. It is also shown that evidence from onomastics disconfirms previous claims regarding the chronology of some of the changes affecting the consonants of Maltese.

Keywords: Maltese, surnames, nicknames, place-names, historical phonology

1. Introduction

The relevance of onomastics for the history of Maltese has not gone unnoticed by researchers. Previous studies have looked into a number of issues, such as the distribution of surnames (Wettinger 1968; Wettinger 1969), the origin of surnames (Fiorini 1987-1988, Wettinger 1999, Cassar 2005), lexical items found or preserved in surnames and nicknames (Aquilina 1964), the origin of nicknames (Wettinger 1971), the semantics of nicknames (Camenzuli 2002), social aspects reflected in nicknames (Cassar Pullicino 1956), the distribution and origin of place-names (Wettinger 2000), the comparison of Maltese and Arabic place-names (Dessoulavy 1957), the influence of Arabic on place-names (Aquilina 1961), some morphological and syntactic characteristics of place-names (Wettinger 1983).

The present paper discusses the relevance of onomastics for the study of some developments affecting consonants in the history of Maltese. The corpus of data consists of Maltese surnames, nicknames and place-names recorded between the 15th and the 18th centuries. All entries include the year of the attestation and the source. When an exact year could not be established a hyphen is used to indicate approximate dates: a year preceded by a hyphen reads ‘in or before’, if followed ‘in or after’. Relevant portions appear in boldface. Some of the original translations into English have been slightly amended; original translations into Italian are reproduced in the footnotes.

2. Analysis

2.1 Neutralization of voicing in word-final position


* University of Bucharest, Department of English, andrei2.avram@gmail.com.
Evidence from surnames and from nicknames of Arabic origin shows that the rule of word-final devoicing was not part of the phonology of 15th century Maltese:

(1)  
   a. *busali*b 1419 \(\text{(Wettinger 1968: 33)}\)  
   b. *mifsud* 1419 \(\text{(Wettinger 1968: 42)}\)  
   c. *muhamud / muhumud* 1419 \(\text{(Wettinger 1968: 42)}\)  
   d. *said / sayd* 1419 \(\text{(Wettinger 1968: 44)}\)  
   e. *hauz* 1419 \(\text{(Wettinger 1968: 30)}\)  
   f. *Cathaldus Muhumu* 1467 \(\text{(Wettinger 1983: 39)}\)  
   g. *mifsud* 1480- \(\text{(Wettinger 1968: 42)}\)  
   h. *said / sayd* 1480- \(\text{(Wettinger 1968: 44)}\)  
   i. *L-Chiccu labiadi* 1483 \(\text{(Wettinger 1971: 40)}\)  

The spelling of place-names also points to the continuous occurrence of voiced obstruents in word-final position until much later, towards the end of the 16th century:

(3)  
   a. *mita Jlchade* 1461 \(\text{(Wettinger 1983: 53)}\)  
   b. *bita mueze* 1486 \(\text{(Wettinger 1983: 32)}\)  
   c. *ta michammed* 1500 \(\text{(Wettinger 1983: 40)}\)  
   d. *ta misge* 1537 \(\text{(Wettinger 1983: 33)}\)  
   e. *ta mihauueg* 1544 \(\text{(Wettinger 1983: 40)}\)  
   f. *il mueye* 1590 \(\text{(Wettinger 1983: 37)}\)  

The following are exceptions:

(4)  
   a. *gebel labiath* 1501 \(\text{(Wettinger 1983: 64)}\)  
      ‘the white rock, the white hill-side’  
   b. *merhelet ilmohos* 1523 \(\text{(Wettinger 1983: 34)}\)  
      ‘the goats’ pen’

However, the digraph <th> in *labiath* ‘white’ appears to be simply an idiosyncratic spelling. In addition, the same place-name is also recorded with final <d>.

---

1 Where <g> presumably stands for [ŋ]; cf. Modern Maltese mghawweg, in which <g> represents [ʧ].
Some phonological changes in Maltese reflected in onomastics

(5)  

ta gebel labiod  

1538  

(Wettinger 1983: 64)  

‘of the white rock, of the white hill-side’

Clear instances of word-final devoiced obstruents are attested in surnames, nicknames and place-names from the 17th century onwards:

(6)  
a.  
Mihammet  
1632  
(Wettinger 1983: 40)  

‘place where the cows are milked’

b.  
Mitahlep  
1647  
(Aabela 1647: 65)  

‘I swed’s [= the dark-skinned’s] threshing floor’

c.  
Kibur elihu  
1647  
(Aabela 1647: 82)  

‘the graves of the Jews’

d.  
Andar l’Isue  
1773  
(Wettinger 1983: 65)  

‘I swed’s [I the dark-skinned’s] threshing floor’

e.  
ta’ Lisuet  
-1798  
(Camenzuli 2002: 322)  

‘of black complexion, dark-skinned’

f.  
ta’ Supperf  
-1798  
(Camenzuli 2002: 323)  

‘proud, arrogant’

As shown by example (6f), word-final obstruent devoicing is also attested in nicknames of Romance origin.

To sum up, evidence from surnames, nicknames and place-names shows that obstruents did not undergo devoicing in word-final position in the 15th century. This is confirmed by textual evidence such as Pietru Caxaru’s Cantilena 5 (c. 1450), which contains no instance of devoiced word-final obstruents. On the other hand, the occurrence in surnames, nicknames and place-names beginning with the 17th century of devoiced word-final obstruents accords well with the fact that these are already attested in 1588, in Hieronymus Megiser’s word-list 7, where devoiced word-final obstruents occur in 10 forms out of 13. Voiced word-final obstruents still outnumber devoiced ones in Philip Skippon’s word-list 8, published in 1664, and in Giovan Francesco Buonamico’s Sonnet 9 (c. 1675), out of five potential occurrences, only two forms exhibit a devoiced word-final obstruent.

2.2 Voicing assimilation

In Modern Maltese, regressive voicing assimilation occurs when voiced and voiceless obstruents occur in adjacent position; consequently, adjacent obstruents agree in voicing, i.e. they are all either voiced or voiceless (Borg 1975: 15-16, Borg 1997: 250,

---

2 Cf. the translation into Italian ‘luogo, oue si mungeua il latte’ (Abela 1647: 65).
3 Cf. the translation into Italian ‘Sepulchri de’ Giudei’ (Abela 1647: 82).
4 Spelled supperv in Modern Maltese.
5 The text is reproduced in Wettinger and Fsadni (1968: 36) and in Wettinger and Fsadni (1983: 47).
6 See also Cohen and Vanhove (1991: 181).
9 See the text in Cachia (2000: 18).
Cardona 1997: 104). The spelling of the following nickname suggests that regressive voicing assimilation did not operate in 15th century Maltese:

(7)  

\[ \textit{Nardus Curmi dictu casbije} \quad 1499 \quad (\text{Wettinger 1971: 45}) \]

‘Nardus Curmi called Stubble’

The absence of regressive voicing assimilation in this form is not surprising in view of data provided by later textual evidence. Thus, regressive voicing assimilation is first attested in 1588 in Megiser’s word-list. As for the 17th century, either the rule had not run its full course or perhaps it was still subject to variation. Thus, only a minority of the relevant forms recorded by Skippon in 1664 exhibit regressive voicing assimilation, while in Buonamico’s \textit{Sonnet} (c. 1675), obstruents undergo devoicing via regressive assimilation in all three relevant forms.

### 2.3 The interdentals fricatives \( t \) and \( d \)

The interdentals \( t \) and \( d \) are not found in any of the earliest attestations of surnames, nicknames or place-names. Instead, their stop reflexes occur, as can be seen in the place-name below:

(8)  

\[ \textit{abel Jtikil} \quad 1525 \quad (\text{Wettinger 1983: 64}) \]

‘the field-strip of the heavy man [nickname]’

The absence of \( t \) and in particular of \( d \) points to their quite unstable status at the time. The voiceless interdental \( t \) occurs – some 75 years earlier – in only one form, spelled with \(<\text{th}>\) in the \textit{Cantilena} (c. 1450), and – 53 years later – in eleven forms, spelled with \(<\text{f}>\) (six occurrences), \(<\text{h}>\) (one occurrence), \(<\text{s}>\) (one occurrence) and \(<\text{sf}>\) (three occurrences), in Megiser’s word-list, recorded in 1588. While the occurrence of \( t \) in the \textit{Cantilena} is dismissed by Cohen and Vanhove (1991: 1979) as being “undoubtedly already an exception in the epoch”, Dessoulay (1937: 1182) writes that “the words [in Megiser’s word-list] seem to show that the soft \( \text{th} \) sound was still heard in Malta in the sixteenth century”. On the other hand, the only known occurrence of \( d \), debatable at all that, is in 1588, in Megiser’s word-list. Thus, it may well be that \( t \) survived longer than \( d \) and was still present in some varieties of 16th century Maltese.

The spelling of the place-names below is certainly interesting, since it raises the question of whether \( t \) may have survived in (some varieties of) 17th century Maltese:

(9)  

\begin{align*}
\text{a.} & \quad \textit{Ghar Buthomma}^{10} \quad 1647 \quad (\text{Abela 1647: 73}) \\
\text{b.} & \quad \textit{Ben Varrath}^{11} \quad 1647 \quad (\text{Abela 1647: 71})
\end{align*}

\( ^{10} \) Cf. Modern Maltese \textit{tonna} ‘measure (of corn)’.  
\( ^{11} \) Cf. Modern Maltese \textit{werriet}.  
\( ^{12} \) Cf. the translation into Italian ‘figlio dell’ Herede’ (Abela 1647: 71).
Some phonological changes in Maltese reflected in onomastics

103

c.  

\textit{Ghar el Methkab}  

‘the drilled cave’\(^{13}\)  

1647  

\hfill (Abela 1647: 22)

If the digraph <th> stands indeed for \(t\), these would be the last known occurrences in (some varieties of) Maltese of the voiceless interdental fricative. Only slightly later, in Skippon’s word-list from 1664, all reflexes of \(*t\) are spelled with <t>.

2.4 The voiceless uvular stop \(q\)

The Modern Maltese reflex of \(*q\) is the voiceless glottal stop ‘ (Cohen 1966: 15, Cohen 1967: 166). The various spellings in surnames, nicknames and place-names show that earlier Maltese still had the voiceless uvular stop \(q\).

One frequently occurring spelling is <c>. Consider first 15\(^{th}\) and 16\(^{th}\) century surnames and nicknames:

(10) a.  

\textit{Gullielmu Staferagi euchede}  

1420s  

\hfill (Wettinger 1971: 45)

‘Gullielmu Staferagi a louse just hatched’

b.  

\textit{Lucas Baldakin alias miseuha}  

1512  

\hfill (Wettinger 1971: 44)

‘Lucas Baldakin the variegated’

c.  

\textit{Joannes Vella Carchille}  

1531  

\hfill (Wettinger 1971: 46)

Note in example (10c) the use of <c> in early Romance loanwords, in which Maltese \(q\) is a reflex of an etymological /\(k/)\(^{14}\).

The use of <c> for \(q\) is also attested in 15\(^{th}\) and 16\(^{th}\) century place-names. These include the examples below:

(11) a.  

\textit{mahanuc}  

1419  

\hfill (Borg 1976: 22)

‘the strangled’

b.  

\textit{calet il habid}  

1487  

\hfill (Wettinger 1983: 56)

‘the slave’s fort’

c.  

\textit{il chubejleth riac}  

1530  

\hfill (Wettinger 1983: 63)

‘the narrow field-strips’

d.  

\textit{il hofra fueanie}  

1587  

\hfill (Wettinger 1983: 61)

‘the upper depression’

The same is also true of a 17\(^{th}\) century place-names:

(12) a.  

\textit{Ghar Barca}  

1647  

\hfill (Abela 1647: 65)

‘the Cave of the Blessing’\(^{15}\)

b.  

\textit{ta sicayac}  

1659  

\hfill (Wettinger 1983: 47)

‘of the small street’

\(^{13}\) Cf. the translation into Italian ‘grotta pertugia, ò forata’ (Abela 1647: 22).

\(^{14}\) Compare \textit{Carchille} to Modern Maltese \textit{qarċilla}.

\(^{15}\) Cf. the translation into Italian ‘Grotta della Benedittione’ (Abela 1647: 65).
Another spelling is <q>, which occurs in the following nicknames:

(13) a. *Luca Lukis beraq* 1525  (Wettinger 1971: 40)
    ‘Luca Lukis the lightning’
  b. *Lumejna bita saqora* 1483  (Wettinger 1971: 46)
    ‘Lumejna of the sack’

Also attested is <k>, in the 16th century place-names below:

(14) a. *Jl harke il chamra* 1523  (Wettinger 1983: 65)
    ‘the red field’
  b. *gued kleya* 1533  (Wettinger 1983: 55)
    ‘the valley at Qleigha’
  c. *habel Jtikil* 1538  (Wettinger 1983: 64)
    ‘the field-strip of the heavy man [nickname]’

With very few exceptions, Abela (1647) uses <K> for reflexes of *q. Consider some of his examples of place-names:

(15) a. *Blat el Kamar* 1647  (Abela 1647: 88)
    ‘the boulders of the moon’
  b. *Ghar BaKar* 1647  (Abela 1647: 73)
    ‘the cave of the cows’
  c. *MaKluba* 1647  (Abela 1647: 100)
    ‘the overturned’
  d. *Tal eenieK* 1647  (Abela 1647: 99)
    ‘of the young she-goats’

Yet another spelling is <ch>, attested in the following nickname:

(16) *Joanna filia Blasii Ketcuti alias manja bachira* 1532  (Wettinger 1971: 44)
    ‘Joanna daughter of Blasius Ketcuti alias ate a cow’.

The digraph <ch> also occurs, more frequently, in place-names:

(17) a. *machalube* 1547  (Borg 1978: 22)
    ‘overturned’
  b. *Jl chareha Jisighire* 1574  (Wettinger 1983: 62)
    ‘the small field’
  c. *Ichens ta fuch Jl gued Jl chibir* 1581  (Wettinger 1983: 66)
    ‘the land on long lease above the big valley’

---

16 Cf. the translation into Italian ‘Roccami della luna’ (Abela 1647: 88).
17 Cf. the translation into Italian ‘grotta delle vacche’ (Abela 1647: 73).
18 Cf. the translation into Italian ‘Riuoltata’ (Abela 1647: 100).
Some phonological changes in Maltese reflected in onomastics

105

Some phonological changes in Maltese reflected in onomastics

d. **choleja**  
   ‘small fort’  
   1585  
   (Wettinger 1983: 44)

Note, in (17c), that <ch> is also used for [k], in *chibir* ‘big’\(^{19}\). This is further proof that the Maltese reflex of *q* was still a voiceless uvular stop, perceived by the transcriber as similar/identical to [k]. The digraph <ch> is also found in early 17\(^{th}\) century place-names:

(18) a. **tal machnuch**  
   ‘of the hoarse person’  
   1610  
   (Wettinger 1983: 39)

b. **el ghilehi sighar**  
   ‘the small fields’  
   1611  
   (Wettinger 1983: 620)

The single exception in which a reflex of *q* is not rendered by any letter must be a scribal error:

(19) **gued il huasa**\(^{20}\)  
   ‘the wide valley’  
   1498  
   (Wettinger 1983: 62)

Similar various orthographic choices to render reflexes of *q* are attested in other early Maltese texts. Thus, around 1450, Caxaru uses <c> (four occurrences), <ck> (one occurrence) and <k> (two occurrences) in his *Cantilena*. In 1588, Megiser transcribes reflexes of *q* with <c> (one occurrence), <ch> (three occurrences) and <k> (one occurrence). In 17\(^{th}\) century texts the situations is as follows. Skippon uses almost exclusively <k> (34 occurrences), <c> (one occurrence) and <q> (one occurrence) in 1664, in his word-list; Buonamico resorts to <cq> (three occurrences) and to <q> (one occurrence) in his *Sonnet* (c. 1675). Of these spellings, <ck> and <cq> are not attested in 15\(^{th}\) and 16\(^{th}\) century Maltese surnames, nicknames and place-names.

Later records, of late 18\(^{th}\) century nicknames exhibit less variation, the only spellings attested being <c> and <ch>. Consider the examples under (20) and (21) of nicknames recorded between 1771 and 1798:

(20) a. **il Maectula**  
   ‘the murdered’  
   -1798  
   (Camenzuli 2002: 323)

b. **ta’ Misruea**  
   ‘stolen’  
   -1798  
   (Camenzuli 2002: 323)

(21) a. **ta’ Busach**\(^{21}\)  
   ‘pot-bellied’  
   -1798  
   (Camenzuli 2002: 321)

b. **tal-mhallach**  
   ‘the hanged’  
   -1798  
   (Camenzuli 2002: 322)

\(^{19}\) Cf. the nickname *Michele Agius il-Chibir* (Camenzuli 2002: 320).

\(^{20}\) Cf. Modern Maltese *wiesa*’ [wiəsa’].

Again, these spellings differ from those in other contemporary sources, such as late 18th sermons, whose authors resort to <ck> and <cq> (Bonelli 1897).

To conclude, the surnames, nicknames and place-names recorded in the 15th through the 18th centuries show that Maltese still had the voiceless uvular stop $q$.

2.5 The voiceless velar fricative $h_{l}$ and the voiceless pharyngeal fricative $h\theta$

Modern Maltese has lost the distinction between the voiceless velar fricative $h_{l}$ and the voiceless pharyngeal fricative $h\theta$.

As shown below, reflexes of $^*h_{l}$ are mostly spelled with <h> or <ch> in 15th century surnames and nicknames. These competing spellings are found even in variants of the same form, as in (22a):

(22) a. $haxixe$ 1419 (Wettinger 1968: 31)  
    $chaxixe$ 1480- (Wettinger 1968: 31)

b. $Jacoba bita challas$ 1483 (Wettinger 1971: 43)  
   ‘Jacoba of the pay master’

The same hold true for 16th century place-names. Consider the pairs of variants below, in which the same noun is spelled either with <h> or with <ch>:

(23) a. $il chireybeth$ 1509 (Wettinger 1983: 50)  
    $ilhireybet$ 1527 (Wettinger 1983: 42)  
    ‘the small ruins’

b. $habel ta mneihor$ 1537 (Wettinger 1983: 48)  
   $mineychor$ 1543 (Wettinger 1983: 48)  
   ‘little nose’

The following example illustrates a rare spelling, namely, the use of <c>:

(24) $ta xueyac$ 1539 (Wettinger 1983: 43)  
   ‘of the little old man’

The reflexes of $^*h\theta$ in 15th and 16th century surnames and nicknames display the same alternation in the use of <h> or <ch>. This is illustrated below with orthographic variants of several forms:

(25) a. $buhaiair$ 1419 (Wettinger 1968: 33)  
    $buchaiair^{22}$ 1480- (Wettinger 1968: 33)

b. $hakem / hakim / chakim$ 1419 (Wettinger 1968: 40)  
   $hakim$ 1480- (Wettinger 1968: 40)

22 Literally ‘big stones’. Cf. the Modern Maltese form $Buhagiar$. 

Andrei A. Avram
Some phonological changes in Maltese reflected in onomastics

107

c.  *mihalette* / *mihallif*  
   *Gullielmu Mahallif Simine*  
   ‘Gullielmu Mahallif [called] Fatness’  
   *michallif*  
   1419  
   (Wettinger 1968: 42)

d.  *mellah*  
   *mellachi*  
   1419  
   (Wettinger 1968: 42)

(26)  

<table>
<thead>
<tr>
<th>a.</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>
| mirachi | 1467 | (Wettinger 1983: 34)  
| miradel | 1487 | (Wettinger 1983: 34)  
| ‘the animal yards’  
| b.  |  |  |  |
| ta bir il-chamem | 1508 | (Wettinger 1983: 58)  
| ta bir il-hammem | 1558 | (Wettinger 1983: 58)  
| ‘of the well of the bathhouse’  
| c.  |  |  |  |
| ta chamayra | 1530 | (Wettinger 1983: 45)  
| ta humayra | 1543 | (Wettinger 1983: 45)  
| ‘of the small donkey’  
| d.  |  |  |  |
| il chofra fucanie | 1548 | (Wettinger 1983: 61)  
| Ji hofra Ji fucanie | 1587 | (Wettinger 1983: 61)  
| ‘the upper depression’  

The digraph *<ch>* is also found in 17th century place-names, in which it represents a reflex of either *<h>*, in (27), or of *<h>*, in (28):

(27)  

|  |  |  |  |
| tal mačmuc | 1610 | (Wettinger 1983: 39)  
| ‘of the hoarse person’  
(28)  

|  |  |  |  |
| tal moftech | 1611 | (Wettinger 1983: 38)  
| ‘of the key’

In addition, the reflex of *<h>* is also spelled with *<c>*, as in the following example:

(29)  

|  |  |  |  |
| il miseyra | 1611 | (Wettinger 1983: 38)  
| ‘the small open place’

The spellings of the surnames, nicknames and place-names considered so far suggest that the two fricatives *<h>* and *<h>* had already merged as early as the 15th

---

23 Literally from *Mellieha* [melliaha], a town in Malta.
century. Contemporary textual evidence also seems to point to the same conclusion. Thus, in the *Cantilena* (c. 1450) reflexes of *h̄l* are represented by <c> (one occurrence), <h> (two occurrences) and <ch> (two occurrences), while reflexes of *h̄o* are spelled with <h> (one occurrence) and <ch> (three occurrences). In the words recorded in 1588 by Megiser reflexes of *h̄l* are rendered with <c> (one occurrence) and <ch> (eight occurrences), whereas reflexes of *h̄o* are represented by <c> (one occurrence), <h> (two occurrences), <k> (one occurrence), <ch> (four occurrences) and Ø (one occurrence). Skippon uses only two spellings in his 1664 word-list: <h> (one occurrence) and <ch> (16 occurrences) for reflexes of *h̄l*, <h> and <ch> (13 occurrences) for reflexes of *h̄o*. In Buonamico’s *Sonnet* (c. 1675) the following spellings are found: <ch> (three occurrences) for reflexes of *h̄l*, <h> (four occurrences) and <ch> (five occurrences) for reflexes of *h̄o*. However, in Abela (1647) – whose relevance to the study of Maltese proper names is unanimously acknowledged – with one single exception all reflexes of *h̄l* are spelled with <ch>, whereas all reflexes of *h̄o* are spelled with <h>. Consider some of the place-names recorded by Abela (1647), containing reflexes of *h̄l*, in the examples under (30), and of *h̄o*, in the forms under (31) respectively:

(30)  
<table>
<thead>
<tr>
<th></th>
<th>Place Name</th>
<th>Year</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td><em>Vyled l’Aherief</em> (‘valley of the lambs’)*24</td>
<td>1647</td>
<td>Abela 1647: 73</td>
</tr>
<tr>
<td>b.</td>
<td><em>Dochlet</em> (‘entrance’)*26</td>
<td>1647</td>
<td>Abela 1647: 25</td>
</tr>
<tr>
<td>c.</td>
<td><em>Ras chanzir</em> (‘the cape of the pig’)</td>
<td>1647</td>
<td>Abela 1647: 16</td>
</tr>
<tr>
<td>d.</td>
<td><em>Ta’l Cherba</em> (‘of the ruined building’)*27</td>
<td>1647</td>
<td>Abela 1647: 98</td>
</tr>
<tr>
<td>e.</td>
<td><em>Vyled el Charrub</em> (‘the valley of the locusts’)*28</td>
<td>1647</td>
<td>Abela 1647: 73</td>
</tr>
</tbody>
</table>

(31)  
<table>
<thead>
<tr>
<th></th>
<th>Place Name</th>
<th>Year</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td><em>Bir el Hut</em> (‘the water tank of the fish’)</td>
<td>1647</td>
<td>Abela 1647: 85</td>
</tr>
<tr>
<td>b.</td>
<td><em>L’Aharasce</em> (‘rough terrain’)*29</td>
<td>1647</td>
<td>Abela 1647: 25</td>
</tr>
<tr>
<td>c.</td>
<td><em>Bir Miftu</em> (‘the open water tank’)</td>
<td>1647</td>
<td>Abela 1647: 103</td>
</tr>
<tr>
<td>d.</td>
<td><em>Taht el gebel</em> (‘under the rock’)*30</td>
<td>1647</td>
<td>Abela 1647: 28</td>
</tr>
</tbody>
</table>

---

24 This is the only exception, in which a reflex of *h̄l* is spelled with <h>.  
25 Cf. the translation into Italian ‘valle d’agnelli’ (Abela 1647: 73)  
26 Cf. the translation into Italian ‘entrata’ (Abela 1647: 25).  
27 Cf. the translation into Italian ‘del edificio rouinato’ (Abela 1647: 98).  
28 Cf. the translation into Italian ‘valle delle carrobbe’ (Abela 1647: 73).  
29 Cf. the translation into Italian ‘terreno aspro, e ruuido’ (Abela 1647: 25).  
30 Cf. the translation into Italian ‘sotto la rocca’ (Abela 1647: 28).
Finally, in late 18th century nicknames an identical spelling <h> is used for reflexes of both h[ and */h/0, as in the examples under (32) and (33) respectively:

(32)  
a. *Hanfusu* \(-1798\) (Camenzuli 2002: 324)  
\[\text{‘grumpy person’ [lit. ‘beetle’]}\]

b. *il-Haddiela* \(-1798\) (Camenzuli 2002: 322)  
\[\text{‘paralyzed’}\]

c. *Mohhu Blihma* \(-1798\) (Camenzuli 2002: 322)  
\[\text{‘ignorant’ [lit. ‘his brains are with water’]}\]

d. *ta’ Harbat* \(-1798\) (Camenzuli 2002: 323)  
\[\text{‘destroyer’}\]

e. *tal-Mishut* \(-1798\) (Camenzuli 2002: 323)  
\[\text{‘the cursed’}\]

(33)  
\[\text{‘kept in custody’}\]

b. *ta’ Harrasci* \(-1798\) (Camenzuli 2002: 323)  
\[\text{‘the harsh one’}\]

c. *tal-Hobra* \(-1798\) (Camenzuli 2002: 322)  
\[\text{‘pregnant’}\]

The use of <h> for reflexes of both fricatives at issue is attested in late 18th century texts (Bonelli 1897) as well.

To sum up, evidence from 17th century place-names (in Abela 1647) suggests that the voiceless velar fricative h[ and the voiceless pharyngeal fricative */h/0 had not as yet merged in the 17th century. Late 18th century spellings of nicknames already point to the tendency towards the merger of these two fricatives.

### 2.6 The voiced velar fricative ġ and the voiced pharyngeal fricative ’

As is well known, Modern Maltese no longer has the voiced velar fricative ġ and the voiced pharyngeal fricative ’ (Borg 1997: 246, Cardona 1997: 22-23). As mentioned by Borg (1997: 246), Modern Standard Maltese exhibits the outcome of “the reinterpretation of the OA [= Old Arabic] velar and pharyngeal fricative pair [ċ] and [ɣ], chiefly as vocalic length”.

The two consonants still occur in 15th and 16th century place-names. In the case of ġ, the most frequent spelling is, by far, <g>, as in the examples below:

(34)  
a. *gar Jlkebir* \(1467\) (Wettinger 1983: 62)  
\[\text{‘the big cave’}\]

b. *tal magalac* \(1500\) (Wettinger 1983: 37)  
\[\text{‘of the enclosure’}\]

c. *gulejca* \(1514\) (Wettinger 1983: 43)  
\[\text{‘small field’}\]

d. *tal gureife* \(1537\) (Wettinger 1983: 44)  
\[\text{‘of the small upper floor room’}\]
In a number of place-names ġ is rendered by <h>:

(35) a. xaret il hadiri 1487 (Wettinger 1983: 56)  'the scrubland at the lake'
    b. misirach sihjr  1521  (Wettinger 1983: 62)  'the small open place'
    c. Ji harke il chamra  1523  (Wettinger 1983: 65)  'the red field'

The use of diagraphs is also attested. One is <gh>, in the following 16th century place-names:

(36) a. il galca sighire  1508  (Wettinger 1983: 62)  'the small field'
    b. el ghuleica  1542  (Wettinger 1983: 43)  'the small field'
    c. Ji charcha Jisighire  1574  (Wettinger 1983: 62)  'the small field'

Moreover, the same spelling is found in 17th century place-names and it is the only one used by Abela (1647):

(37) a. el ghilechi sighar  1611  (Wettinger 1983: 62)  'the small fields'
    b. Gebel el Ghzara  1647  (Abela 1647: 71)  'the rock of abundance'
    c. Ghar Ghliem  1647  (Abela 1647: 72)  'the serf’s cave'
    d. Hal Seyegh  1647  (Abela 1647: 101)  'the village of the silversmith'

Another digraph is <ch>, which occurs in the 16th century place-name below:

(38) Ji charcha Jisighire  1574  (Wettinger 62)  'the small field'

The same spelling is found in one 17th century place-name, in word-final position:

---

31 Cf. the translation into Italian ‘Grotta del Seruo’ (Abela 1647: 72).
32 Cf. the translation into Italian ‘Casale dell’ Argentiere’ (Abela 1647: 101).
Some phonological changes in Maltese reflected in onomastics

(39) Sebbiech 1647 (Abela 1647: 69)
   ‘painter’

Given Abela’s consistency in transcribing reflexes of *ġ with <gh>, in this form <ch> stands for the voiceless velar fricative [x]. This is an allophone of ʾ, a result of obstruent devoicing in word-final position. Finally, in the corpus there is just one exception, in which a reflex *ġ is not spelled with a consonant letter:

(40) zayra 1419 (Borg 1976: 194)
   ‘small-FEM’

In all likelihood, this apparent exception can be dismissed as a misspelling, where <a> should read <g>. As shown above, all reflexes of *ġ are rendered with a consonant letter or a digraph, and there is no case of the use of double vowel letters suggestive of the reinterpretation of *ġ as vocalic length.

A comparison with other early texts yields the following results. Caxaru uses <g> (one occurrence) in his Cantilena (c. 1450). Megiser writes ġ with <r> (one occurrence) in 1588. Buonamico uses <gh> (two occurrences) in his Sonnet (c. 1675). Finally, in 1664 Skippon is remarkably consistent in the almost exclusive use of <g> (12 occurrences), with one exception when he uses <h>, in word-final position. As in the place-names considered above, in all these early sources, *ġ is always transcribed by a consonant letter. On the other hand, <h> and <ch> are used to render ġ only in place-names, in which the use of <r> is not attested

In sum, evidence from place-names recorded until the 17th century – corroborated with the one provided by other contemporary sources – shows that ġ still occurred in Maltese, in various phonological environments, including word-final position.

In late 18th century nicknames, while <g> no longer appears, <h> continues to be used:

(41) a. il Bahal -1798 (Camenzuli 2002: 324)
   ‘the bastard’
b. ta’ Berhuda -1798 (Camenzuli 2002: 322)
   ‘with fleas’

Of the two digraphs formerly used, <gh> and <ch>, only the latter is found:

(42) ta’ Misbух -1798 (Camenzuli 2002: 322)
   ‘the outstripped’

Given that <ch> occurs in word-final position, it reflects a phonetic realization as a voiceless velar fricative [x], explicitly noted and commented upon by contemporary

33 Cf. the translation into Italian ‘Tintore’ (Abela 1647: 69).
34 Cf. Modern Maltese bagħal ‘mule’.
35 Cf. Modern Maltese miżbugħ ‘painted’.
Andrei A. Avram

writers<sup>36</sup>. On the other hand, <gh> continues to occur in other late 18<sup>th</sup> sources, such as sermons (Bonelli 1897).

Consider next the fate of the voiced pharyngeal fricative <`. In 15<sup>th</sup> century surnames and 16<sup>th</sup> century place-names, the most frequently found spelling is <h>, both word-initially and word-medially, as illustrated by the examples under (43) and (44) respectively:

(43)  
a. habdille  1419  (Wettinger 1968: 30)  
b. haius  1419  (Wettinger 1968: 30)  
c. harabi  1419  (Wettinger 1968: 30)  
d. calet il habid  1487  (Wettinger 1983: 56)  
   ‘the slave’s fort’  

(44)  
a. tal husayfar  1507  (Wettinger 1983: 47)  
b. merhelet ilmhos  1523  (Wettinger 1983: 34)  
   ‘the goats’ pen’  

The digraph <ch> appears in one 16<sup>th</sup> century place-name:

(45)  
bital charab  1529  (Wettinger 1983: 52)  
   ‘of the Arabs’  

The reflex of word-initial <` is not transcribed with any consonant letter in several surnames and nicknames recorded in the 15<sup>th</sup> century:

(46)  
a. abdille  1480-  (Wettinger 1968: 30)  
b. aius  1419  (Wettinger 1968: 30)  

Similarly, in the following 16<sup>th</sup> century place-name word-initial < is not rendered in the orthography by any consonant letter:

(47)  
te gued bir abdalla  1542  (Wettinger 1983: 57)  
   ‘of the valley of Abdilla’s well’  

Word-medial <, if transcribed, is spelled also spelled with <h>, as in the following nickname, in (48), and place-names, under (49):

(48)  
Jacobo Chirmel alias mehze  1494  (Wettinger 1971: 44)  
   ‘Jacobo Chirmel alias the goat’  

(49)  
a. macahad ilme  1504  (Wettinger 1983: 32)  
   ‘the place where water collects’  
b. merhelet il mohos  1523  (Wettinger 1983: 34)  
   ‘the goats’ pen’  

<sup>36</sup> See Vassalli (1796: 314).
Some phonological changes in Maltese reflected in onomastics

On the other hand, intervocalic ‘ is not represented by any consonant letter in variants of the place-name Qleigha, cf. Ar. quley’ā ‘small fort’:

(50) a. gued il culeja 1488 (Wettinger 1983: 55)
b. gued il culaya 1500 (Wettinger 1983: 55)
c. gued kleya 1533 (Wettinger 1983: 55)
   ‘the valley at Qleigha’

Mention should also be made of word-final *’ in the various reflexes of Ar. mitā. In 15th and 16th century nicknames and place-names three such reflexes occur: bita and, more rarely, mita, and ta / tha / te, the latter replacing the first two before the end of the 16th century. The spelling of these reflexes – i.e. the absence of any consonant letter – suggests that the voiced pharyngeal fricative ‘ no longer occurred in word-final position, if preceded by /a/. Consider the nicknames under (51) and the place-names under (52) respectively:

(51) a. Francza bita sible 1483 (Wettinger 1971: 46)
   ‘Francza of the dung’
b. Lumejna bita saqora 1483 (Wettinger 1971: 46)
   ‘Lumejna of the sack’
c. Palma et Catharina bita gilidi 1485 (Wettinger 1971: 43)
   ‘Palma and Catherina of the skin’
d. Luchia bita lispital 1498- (Wettinger 1971: 46)
   ‘Luchia from the hospital’
(52) a. mita Ilchaded 1461 (Wettinger 1983: 53)
   ‘of the iron’
b. bita muezeb 1486 (Wettinger 1983: 54)
   ‘of the gutter’
d. ta Iculeyat 1496 (Wettinger 1983: 50)
   ‘of the small forts’
d. tha Jimreychilet 1542 (Wettinger 1983: 34)
   ‘of the small animal yards’
e. te gued bir abdalla 1542 (Wettinger 1983: 57)
   ‘of the valley of Abdilla’s well’

Reflexes of word-initial and word-medial *’ are almost consistently spelled with a double vowel letter by Abela (1647):

37 In the Modern Maltese spelling the digraph <gh> represents here an etymological ‘.
39 According to Wettinger (1983: 54), “the last known use of bita occurs in 1539”.

There are several exceptions. These include a form spelled with a single vowel letter in word-initial position, but which also has a variant with a double vowel letter. Compare the spellings of ‘slaves’ and ‘slave’ respectively in the following place-names:

Abela’s spellings of the reflexes of Ar. mitā’ confirm that ‘ no longer occurred in this position if preceded by the vowel /a/:

It appears, then, that ġ and ‘ had not as yet merged in Abela’s time. This is further confirmed by the following place-name which contains reflexes of both *ġ and *’, in the same, word-initial position:

While Abela’s spellings of reflexes of word-initial and word-medial *’ with a double vowel letter are suggestive of vocalic length, reflexes of *’ continue to be rendered with

---

40 Cf. the translation into Italian ‘Casale del macilente, ò debole’ (Abela 1647: 84).
41 Cf the translation into Italian ‘nido della Colomba’ (Abela 1647: 27)
42 Cf. the translation into Italian ‘torrente di Mele’ (Abela 1647: 71).
43 Cf. the translation into Italian ‘forte [dei] schiaui (Aaabid detti in Arabo)’ (Abela 1647: 71).
44 Cf. the translation into Italian ‘valle ou’ è il pozzo del seruo di Dio’ (Abela 1647: 100).
45 Cf. the Italian translation ‘delle pietre’ (Abela 1647: 107).
46 Cf. the translation into Italian ‘Fontana del coruo’ (Abela 1647: 66).
consonant letters as well. For example, the reflex of *‘ is spelled with <h> in the following 17th century place-name:

(57) gudia el hali a  
     ‘the high hillock’

Other 15th, 16th and 17th century sources also display a great variety in the spelling of reflexes of *‘. Thus, in the Cantilena (c. 1450), <h> stands for ‘ word-initially (four occurrences) and word-medially (four occurrences); in word-medial position ‘ is also transcribed with <g> (one occurrence); ‘ is not represented by any letter in intervocalic (five occurrences) and word-final position (two occurrences). In 1588, Megiser uses in his word-list <h> (one occurrence) and <ch> (one occurrence) for ‘ in word-medial position; on the other hand, ‘ is also represented by Ø: word-initially (four occurrences), word-medially (one occurrence) and word finally (three occurrences). By far the widest range of orthographic options is found in Skippon’s word-list in 1664: Ø (10 occurrences), a double vowel letter (two occurrences) or a vowel letter (one occurrence) in word-initial position; <h> (one occurrence), a double vowel letter (three occurrences) or Ø (one occurrence) in intervocalic position; a vowel (two occurrences) or Ø (nine occurrences) in other word-medial contexts; <h> (three occurrences), <ch> (two occurrences) or Ø (three occurrences) in word-final position47. Finally, Buonamico does not use any consonant letter in his Sonnet (c. 1675): reflexes of ‘ are transcribed with a double vowel letter both word-initially (two occurrences) and word-medially (two occurrences); one word-initial ‘ is not represented by any letter. The occasional use of a double vowel letter by both Skippon and Buonamico might suggest that the gradual reinterpretation of Ar. ‘ as vocalic length had already started, not only in word-initial, but also in word-medial position.

The voiced pharyngeal fricative ‘ is still attested in word-medial position in a late 18th century nickname:

(58) tal-mhallach -1798 (Camenzuli 2002: 322)
     ‘the hanged’

The use of <h> is rather surprising since in other contemporary texts, if transcribed, ‘ is spelled with <gh> both word-initially and word-medially, e.g. in late 18th century sermons (Bonelli 1897). As in earlier nicknames and place-names, ‘ does not occur word-finally, if preceded by the vowel /a/. In this case, *‘ appears as <’>, as in the reflex of Ar. mitā’

(59) a. ta’ Fattar -1798 (Camenzuli 2002: 321)
     ‘stout person of awkward figure’

b. ta’ Coleriti -1798 (Camenzuli 2002: 322)
     ‘angry, enraged’

47 This variety of spellings clearly disconfirms Cachia’s (2000: 41) claim that Skippon spelled “words with ‘ayn […] with double vowels”.
c.  
\textit{ta’ Fitta} -1798 (Camenzuli 2002: 323) 
‘importunate person’

d.  
\textit{ta’ Gamiema} -1798 (Camenzuli 1798: 324) 
‘grumbling person [lit. ‘turtle-dove’]’

To conclude, the spelling of surnames, nicknames and place-names is further confirmation of the fact that both the voiced velar fricative \( \dot{g} \) and the voiced pharyngreal fricative ‘ survive to some extent in most dialects of Maltese, i.e. they are still two different phonemes, at least until the end of the 18\textsuperscript{th} century\textsuperscript{48}. The use of \(<h>\) for both consonants may be indicative of the tendency towards their merger, which also accords with explicit descriptions and comments in contemporary sources\textsuperscript{49}.

\subsection*{2.7 The voiceless laryngeal fricative \( h \)}

The inventory of consonantal phonemes of Modern Maltese does not include the laryngeal fricative \( h \) (Cohen 1967: 164, Borg 1973: 8, Borg 1975: 11, Cardona 1997: 23).

The following 15\textsuperscript{th} and 16\textsuperscript{th} century place-names show that \( h \) still occurred in Maltese, including in intervocalic position:

\begin{itemize}
  \item \textit{zahara} 1480- (Borg 1976: 194) 
    ‘blossom’
  \item \textit{siheym} 1514 (Wettinger 1983: 42) 
    ‘small allotment’
  \item \textit{siheym} 1530 (Wettinger 1983: 42) 
    ‘small allotment’
  \item \textit{ysiheym} 1558 (Wettinger 1983: 42) 
    ‘the small allotment’
\end{itemize}

This accords with the situation reflected by 15\textsuperscript{th} and 16\textsuperscript{th} century texts. In the \textit{Cantilena} (c. 1450), 11 out of 12 possible occurrences of \( h \) are reflected in the spelling, invariably \(<h>\): all eight instances of word-initial \([h]\), three out of four cases of word-medial \([h]\), two of which in intervocalic position. Similarly, in Megiser’s word-list (1588), \( h \) is rendered with \(<h>\) in three out of four possible cases: two word-initially and one word-medially in intervocalic position; the only word-final \(*h* \) is not reflected in the spelling. Relevant forms in 17\textsuperscript{th} century place-names show that \( h \) continued to occur, including in intervocalic position. Consider the following examples:

\begin{itemize}
  \item \textit{Bir el dheeb} [= \textit{deheb}] 1647 (Abela 1647: 107) 
    ‘well of gold’\textsuperscript{50}
  \item \textit{Kibur elihiut} 1647 (Abela 1647: 82) 
    ‘the graves of the Jews’
\end{itemize}

\textsuperscript{48} And possibly in early 19\textsuperscript{th} century as well.
\textsuperscript{49} Such as Vassalli (1796: 239 and 314).
\textsuperscript{50} Cf. the translation into Italian ‘pozzo d’oro’ (Abela 1647: 107).
Some phonological changes in Maltese reflected in onomastics

Corroborating evidence is provided by other samples of 17th century Maltese. Thus, seven forms in Skippon’s word-list (1664) testify to the occurrence of $h$: two word-initially and five word-medially, of which four in intervocalic position; in two cases, $h$ is represented in intervocalic position by Ø; however, in one of these forms it is also spelled with <h>. Finally, in Buonamico’s Sonnet (c. 1675), $h$ is represented in the spelling with <h> in all four possible instances: twice word-initially and twice word-medially in intervocalic position.

Word-initial $h$ is also found in late 18th century nicknames:

(62)  
\begin{tabular}{lcl}
\textit{ta’ Hafif} & -1798 & (Camenzuli 2002: 322) \\
‘silly, mentally defective’ & & \\
\end{tabular}

The occurrence of word-initial $h$ is corroborated by evidence provided by late 18th texts (Bonelli 1897), in which $h$, rendered by <h>, which is well attested not only word-initially, but also word-medially, and which apparently still occurs even in word-final position.

To sum up, evidence from pre-19th century nicknames and place-names confirms that the voiceless laryngeal fricative $h$ was still part of the phonological system of Maltese.

3. Conclusions

In many cases, onomastics corroborates evidence gleaned from other early sources, and confirms the absolute and relative chronologies suggested in the literature on the historical phonology of Maltese. For instance, both onomastics and other textual evidence show that the rules of word-final devoicing of obstruents and of regressive voicing assimilation, discussed in sections 2.1 and 2.2 respectively, start operating towards the end the 16th century.

In other cases, however, evidence provided by the transcriptions of proper names points to rather different conclusions. For instance, as shown in section 2.3, (some varieties of) Maltese may have still had the interdental fricative $\theta$ in the first half of the 17th century. Corroborated with the occurrence of $\theta$ in Megiser’s word-list recorded in 1588, this refutes a recurrent claim in the literature. Thus, Cohen (1966: 13) states that “the confusion of these two articulations [dental and interdental] may go back to a pre-Maltese stage”. The same claim is repeated in Cohen (1967: 168): “one can assign to a pre-Maltese stage the confusion of dentals and interdentalsofar”. More recently, Vanhove...
Andrei A. Avram

(1994: 170) also writes that “the absence of interdentals goes back to the pre-historical period of Maltese”. Clearly, the demise of t occurred at a much more recent date than hitherto assumed.

As is well known, the current phonetic realization of the reflex of *q as a voiceless glottal stop has been taken by some linguists as proof of the Oriental origin of Maltese (Stumme 1904) or of the influence of an alleged Punic substrate (Aquilina 1981). The evidence provided by the spellings of nicknames discussed in section 2.4 demonstrates that the reflex of *q was still realized phonetically as a voiceless uvular stop. This clearly rules out a Punic substratal effect, which would have manifested itself much earlier in the history of Maltese. Moreover, as put by Cohen and Vanhove (1991: 181), “the change from /q/ to /‘/ is not contemporary with the Arabization of the island”. Finally, the fact that Maltese did have the voiceless uvular stop q also disconfirms Krier’s (1976: 35) claim that in the adaptation of Romance loanwords “the strangest case of mutation is represented by “the glottal stop” which replaces voiceless and voiced velars”. Krier (1976: 35) writes that this distinguishes Maltese form the Arabic dialects spoken in the Maghreb, in which “Romance /k/ is borrowed under the form of /q/”. In fact, exactly as in the Maghrebian dialects, /k/ in early Romance loanwords is first rendered by [q]. It is only at a later stage that the phonetic realization of the reflex of *q shifted to [], the voiceless glottal stop of Modern Maltese.

According to Borg (1997: 259), “the unconditional merger of *h~ and *x had probably already occurred in Medieval M [= Maltese]”. In support of this claim, Borg (1997: 259) mentions “the use of the digraph ch for the reflex of both OA [= Old Arabic] sounds in the late 15th century poem, Peter Caxaro’s Cantilena”. However, as shown in section 2.5, the different orthographic choices in the transcription of reflexes of *g and *‘ suggests that at least until the 17th century the two fricatives had not merged yet and had not been reinterpreted as vocalic length. Under the circumstances, Cantineau’s (1960: 72) claim that “in Maltese, undoubtedly under the influence of the Punic substrate, the old h~ became h~ and the old g turned into “ cannot be upheld.

Proper names have thus been shown to represent a source worth tapping into in search of insights into the gradual emergence of the system of consonantal phonemes of Modern Maltese and of some of its specific phonological rules.

References
Some phonological changes in Maltese reflected in onomastics
