

The Historical Development of the Maltese plural suffixes *-iet* and *-(i)jiet*

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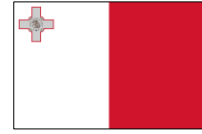
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Introduction



- This paper explores the development of two Maltese suffixes of Semitic origin: *-iet* (e.g. *papa* ~ *papiet* “pope(s)”) and *-(i)jiet* (e.g. *omm* ~ *ommijiet* “mother(s)”).
- *-(i)jiet* developed from *-iet* due to extensive borrowing of *i*-final Italian words.
 - Affixation triggers glide-epenthesis, producing *ijiet* (i.e. *i+iet* > *ijiet*).
 - With many *ijiet*-final plurals, speakers reanalyze this as a suffix and extend it to new words.
 - Glide-epenthesis occurs elsewhere in Maltese and in other varieties of Arabic, but without the contact-induced conditions for reanalysis similar reanalyses did not occur.
- *-iet* acquired two unique properties – restriction to words having *a*-final singulars; obligatory omission of stem-final vowels upon suffixation – due to a subsequent reanalysis of the pluralization of collective nouns.
 - This reanalysis reflects a more general weakening of the Semitic element in Maltese.

History of Maltese



- Maltese is a Semitic language which has been shaped by extensive contact with Indo-European languages over the last millennium (Brincat 2011).

- 800 BC: the island of Malta.
- 100 BC: Sicily migrate to Malta, but ultimately develop into Maltese.
- 100 BC: Siculo-Arabic into contact with Classical Arabic and other dialects of St. John of Jerusalem.
- 100 BC: French influence on Malta, bringing French loanwords.
- 100 BC: attempt to suppress the use of Maltese.
- 100 BC: the two official languages are Maltese and English.
- 100 BC: Maltese television programs.

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Linguistic Background of Maltese

- Contact with Indo-European languages has reshaped the structure of Maltese.
- Semitic elements lacking counterparts in Indo-European are gradually falling out of use; elements with counterparts in Indo-European (e.g. concatenative morphology) have flourished (Mifsud 1995).
- Today, Maltese possesses a range of plural suffixes from various languages:

Suffix	Source
a) -iet /i:t/, -at /a:t/	< Ar. -āt « انت »
b) -(i)jiet / (i)ji:t/, -(i)jat / (i)ja:t/	< Ar. -āt « انت »

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b) -(i)jiet / (i)jɪ:t/, -(i)jat / (i)jɑ:t/	< Ar. -āt ‹ ات- ›
c) -in /i:n/	< Ar. -īn ‹ ين- ›
d) -a	< Ar. -a ‹ ة- ›
e) -ejn (du.)	< Ar. -ajn ‹ ين- › (du.)

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d) -a	< Ar. -a ‹ ة- ›
e) -ejn (du.)	< Ar. -ajn ‹ ين- › (du.)
f) -i	< Sc./It. -i
g) -s	< En. -s

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Linguistic Background of Maltese

- Maltese *-iet* and *-(i)jiet* ultimately derive from Arabic *-āt* < ات- >.
 - *Imaala* (Borg 1976) – Historical process whereby the long low vowel /a:/ raised and fronted except in the neighborhood of historically back consonants.
 1. Arabic *šabbāt* /ʃab:-a:t/ < شبّات > > Maltese *xebbiet* /ʃeb:-ɪ:t/ “young women”
 2. Arabic *šam’āt* /ʃamʕ-a:t/ < شمّعات > > Maltese *xemgħat* /ʃem-a:t/ “candles”
**xemgħiet* /ʃem-ɪ:t/
 - Each suffix has a low-vowel-preserving allomorph: *-at* /a:t/; *-(i)jat* /(i)ja:t/

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Linguistic Background of Maltese

- Historically, *-iet* pluralized feminine and collective nouns (Mifsud 1996).
 - Collectives historically were a type of syntactically singular noun that denoted an uncountable genus, species, material, or “quality of being”.
 - Collectives are often treated as syntactically plural in modern Maltese (Mifsud *ibid.*).
 - Singulars were formed through the affixation of feminine *-a* or (infrequently) masculine *-u* to the collective and denoted one unit of the collective.
 - Plurals were formed through the affixation of *-iet* and denoted quantities from two to ten, after which the singular is used.

Collective	Singular	Plural	Gloss
lewż	lewża	lewżiet	“almond”
basal	basla	basliet	“onion”
nemel	nemla/nemlu	nemliet	“ant”
dud	duda	dudiet	“worm”

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Linguistic Background of Maltese

- *-iet* triggers the deletion of the preceding vowel on V-final forms:
 3. *papa* “pope” + *-iet* “pl.” > *papiet*
- *-(i)jjiet* occurs as *-jjiet* on C-final forms and as *-jiet* (with stem-final-V preserved) or *-ijiet* (with stem-final-V deleted) on V-final forms.
 4. *omm* “mother” + *-(i)jjiet* “pl.” > *ommijiet*
 5. *tabù* “taboo” + *-(i)jjiet* “pl.” > *tabujiet*
 6. *sigġu* “chair” + *-(i)jjiet* “pl.” > *sigġijiet*

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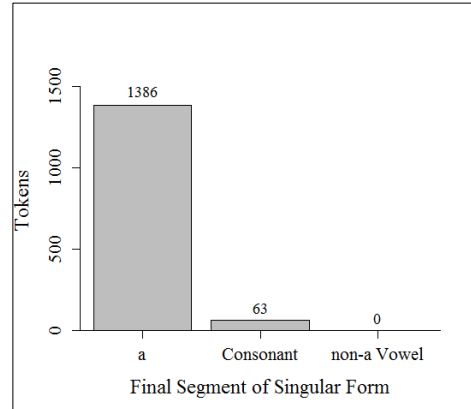
Research Question

- The present study explores the diachronic development of *-(i)jjiet*.
 - Both *-iet* and *-(i)jjiet* ultimately derive from Arabic *-āt* < -ات > via *imaala* (Borg 1976), but the source of the *(i)j* of the latter remains to be explored.
- Likewise, the present study explores the behavior of *-iet* in modern Maltese.
 - Upon affixation to a V-final stem, *-iet* triggers vowel deletion (e.g. *papa* ~ *papiet* “pope(s)”).
 - This property is not shared by Maltese *-(i)jjiet*, nor by Arabic *-āt*.
- Aquilina (1987-90), the Maltese-English-Maltese dictionary considered to be the standard dictionary of Maltese, was surveyed for all *-iet*-/*-(i)jjiet*-suffixed plurals.
 - 1,449 *-iet*-suffixed plurals and 2,386 *-(i)jjiet*-suffixed plurals were found in Aquilina (*ibid.*).
 - The distribution of these suffixes was then analyzed and compared.

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Distribution of *-iet* and *-(i)jiet*

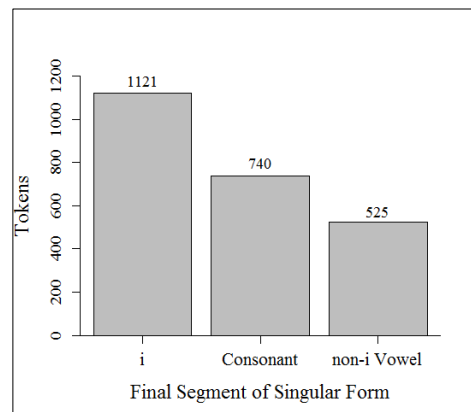
- 1,449 words having an *-iet*-suffixed plural were found in Aquilina (1987-90).
- *-iet* pluralizes 1,386 words having an *a*-final singular. This is independent of morphology:
 - *a* is the singular suffix (e.g. *lewža* ~ *lewżiet* “almond(s)” < collective *lewż*);
 - *a* is non-morphemic (e.g. *papa* ~ *papiet* “pope(s)”).
- *-iet* also pluralizes 63 C-final singulars; no V-final singulars which lack an *a*-final form.
- A chi-squared goodness-of-fit test suggests an association between pluralization via *-iet* and *a*-finality ($\chi^2(1, N = 1,449) = 1208$, $p < 0.001$).



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Distribution of *-iet* and *-(i)jiet*

- 2,386 words having an *-(i)jiet*-suffixed plural were found in Aquilina (1987-90).
- *-(i)jiet* pluralizes 1,121 words having an *i*-final singular. Most of these words:
 - are of Italian origin (e.g. *uniformi* ~ *uniformijiet* “uniform(s)” < Italian *uniforme*); and/or
 - end in the Italian-origin suffix *-(az)zjoni* (e.g. *ekwazzjoni* ~ *ekwazzjonijiet* “equation(s)”).
- A chi-squared goodness-of-fit test suggests that the distribution of *-(i)jiet* among *i*-final, C-final, and non-*i* V-final singulars is not due to random chance ($\chi^2(2, N = 2,386) = 229.1$, $p < 0.001$).



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Distribution of *-iet* and *-(i)jiet*

- The distribution of *-iet* and *-(i)jiet* suggests that the latter has been the more productive suffix at a more recent point in Maltese history.
- *-(i)jiet* can pluralize words of any language-of-origin:
 7. Arabic *dubb* < دُب > “bear” > Maltese *debb* ~ *debbijiet*
 8. Sicilian *seggia* “furniture” > Maltese *siġġu* ~ *siġġijiet*
 9. Italian *stazione* “station” > Maltese *stazzjon* ~ *stazzjonijiet*
 10. French *bureau* “desk, office” > Maltese *burò* ~ *burojiet*
 11. English *shelter* > Maltese *xelter* ~ *xeltrijiet*
- *-iet* pluralizes few recent (i.e. English) loans, and only ones having *a*-final singulars.
 12. English *bricks* > Maltese coll. *briks* ~ sg. *briksa* ~ pl. *briksiet*
 13. English *whaler* > Maltese *wejla* ~ *wejljet*

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Distribution of *-iet* and *-(i)jiet*

- The distribution of *-iet* and *-(i)jiet* suggests that the latter has been the more productive suffix at a more recent point in Maltese history.
- Maltese has two pairs of homophones where the older word takes *-iet* while the newer one takes *-(i)jiet*.
 13. Arabic *lift* < لِفْت > “turnip” > Maltese *lift* ~ *liftiet* “turnip(s)”
 14. English *lift* “elevator, lift” > Maltese *lift* ~ *liftijiet* “elevator(s), lift(s)”
 15. Sicilian *aluzzu* “barracuda” > Maltese *lizz* ~ *lizziet* “barracuda(s)”
 16. English *leads* > Maltese *lizz* ~ *lizzijiet* “shim(s)”

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The emergence of *-(i)jjiet* from *-iet*

- The development of *-(i)jjiet* was driven by the influx of *i*-final Italian words.
- Hypothesis 1: Speakers pluralized such words with *-iet*.
 - Historically, *-iet* would not have triggered the deletion of the final vowel.
 - Suffixation triggers *j*-epenthesis between the stem-final and suffix-initial vowels.
- Hypothesis 2: With a large number of plural words now ending in the sequence *ijjet*, speakers reanalyzed this as a plural suffix and extended it to new words.

uniformi + *-iet*

**uniform-iet*

uniformi-j-iet

uniformijjet;

stazzjon + *-ijjet*

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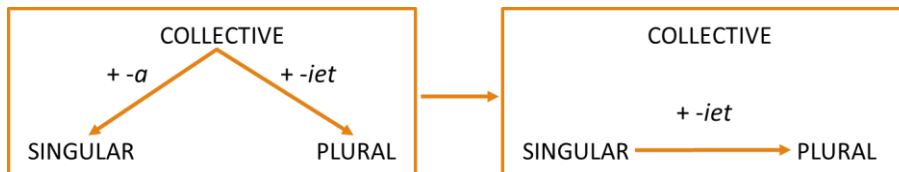
The emergence of *-(i)jjiet* from *-iet*

- Glide-epenthesis is well-attested between stem-final and suffix-initial vowels:
 17. *mdorri* “one accustomed to s.t.” + *-in* “pl.” > *mdorrijin*
 18. *gru* “crane (coll.)” + *-a* “sg.” > *gruwa*; + *-iet* “pl.” > *gruwiet*
- Glide-epenthesis is attested in other Arabic varieties: Eastern Libyan (Owens 1984), Moroccan (Harrell 2004), Tunisian (Ben Abdelkader *et al.* 1977, Chekili 1982), Iraqi (Erwin 1963), and Syrian (Cowell 1964), and produces strings comparable to *ijjet*.
 19. *badawi* “Bedouin” + *-a* “fem. sg.” > *badawiyya*; + *-a:t* “fem. pl.” > *badawiyya:t*
 20. *taksi* “taxi” + *-a:t* “pl.” > *taksiyya:t*
 21. *ki:lo* “kilo” + *-a:t* “pl.” > *ki:lowwa:t* (Eastern Libyan Arabic, Owens 1984: 60-1)
- Language contact produced the conditions necessary for reanalysis only for the Maltese sequence *ijjet*.

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Further developments in *-iet*

- *-iet* acquired two unique properties due to a subsequent reanalysis of the pluralization of collective/singular nouns.
 - *-iet* is largely restricted to words having *a*-final singulars;
 - upon affixation, *-iet* obligatorily deletes the preceding vowel.
- Historically, *-iet* affixed to the collective. I propose that speakers reanalyzed the plural suffix as affixing to the *a*-final singular form.
 - i.e. {coll. *lewż* “almond” + *-iet* “pl.”} > {sg. *lewża* “almond” + *-iet* “pl.”}: *lewżiet* “almonds”



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Further developments in *-iet*

- *-iet* acquired two unique properties due to a subsequent reanalysis of the pluralization of collective/singular nouns.
- This fits the general weakening of Semitic elements of Maltese that are foreign to Indo-European languages, in which there is no collective (Mifsud 1995).
- This also fits modern speakers' tendency to treat the collective as a plural form (Mifsud 1996, Borg and Azzopardi-Alexander 1997).
- This could also be a case of linguistic exaptation (Lass 1990).
- Since the *a* of the singular does not recur in the *-iet*-suffixed plural, speakers reanalyzed the *a* as being deleted upon suffixation. Hence *-iet* triggers vowel-deletion even when final-*a* is non-morphemic.
 23. *papa* “pope” + *-iet* “pl.” > *papiet*, **papawiet*

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Discussion & directions for future research

- *-(i)jjiet* developed from *-iet* due to extensive borrowing of *i*-final Italian words.
 - Future research should explore the extension of *-(i)jjiet* to Semitic words which had a different plural form historically (e.g. *art* “earth, land”, pl.: 1400s *iradi*, today *artijiet*).
- *-iet* gained two unique properties – restriction to *a*-final singulars and obligatory V-deletion – due to a separate reanalysis of the pluralization of collectives.
 - The results of a backformation task could support the claim that speakers associate *-iet* as the pluralizer of *a*-final words.
 - Future research should explore the property of vowel-deletion in *-(i)jjiet*. Is this property spreading to this suffix, making it fall more in line with *-iet*?
 - Future research should explore the distribution of *-iet* and *-(i)jjiet* among *a*-final words.

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Grazzi ħafna!

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Semitic elements foreign to Indo-European are gradually falling out of use; more familiar elements (e.g. concatenative morphology) have flourished (Mifsud 1995).

Today, Maltese possesses a range of plural suffixes from various languages:

Suffix	Source	Example	Gloss
a) -iet /i:t/, -at /a:t/	< Ar. -āt < ات >	għatsa ~ għatsiet	"sneeze(s)"
b) -(i)jjiet /-(i)jɪ:t/, -(i)jat /-(i)jɑ:t/	< (Ml. -iet <) Ar. -āt < ات >	omm ~ ommijiet	"mother(s)"
c) -in /i:n/	< Ar. -īn < ين >	qassis ~ qassisin	"priest(s)"
d) -a	< Ar. -a < ة >	pustier ~ pustiera	"postal carrier(s)"
e) -ejn (du.)	< Ar. -ajn < ين > (du.)	għajn ~ għajnejn	"eye(s)"
f) -i	< Sc./It. -i	lingwa ~ lingwi	"language(s)"
g) -s	< En. -s	kompjuter ~ kompjuters	"computer(s)"