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INTERNAL PLURALIZATION IN MALTESE:
CONTINUITY AND INNOVATION

The following brief points are intended to serve as a background to the theme that is under discussion:

1. For the last 900 years, the Arabic dialect of Malta has been in close contact with non-Semitic languages, especially medieval Sicilian, Italian and more recently English.

2. For most of this time it was severed from the Classical / Modern Standard Arabic language and its dialects, as well as from the Islamic religion and culture.

3. In the field of morphology, the main problem facing Maltese has been the basic incongruence between the non-concatenative root-based morphology of the Arabic stock and the concatenative (i.e. stem-based) morphology of the superstrata which were grafted on it.

4. Full integration of a loanword generally involves the "dehydration" of its stem and the abstraction of a root-base of 3 or 4 consonants on the Arabic model. What makes this process possible is primarily the similarity between the syllabic form of the loanword and that of a native pattern of which it becomes a member.

5. Pluriconsonantal words obviously pose a problem, which Maltese had to face fully due to its large-scale borrowing of such words from Romance languages.

6. In Maltese, the native Arabic morphology is often "under stress" and at times is forced to compromise with the morphology of borrowed words.

In this paper I shall try to analyze one particular feature of the Arabic structure of Maltese, namely internal pluralization, and to follow its historical development across the different components which make up modern Maltese. This will serve to highlight on one hand its continued productivity with words of non-Arabic origin (here referred to as *RM* "Romance Maltese" or *EM* "English Maltese"), and on the other the changes which the system has been submitted to, both by internal development in the dialectal Arabic stratum of Maltese and by the pressure of a large volume of borrowings, some of which could only with difficulty conform to the norms of the host language. It will consist of three parts containing: (A) general historical changes affecting internal plurals in Maltese; (B) a short review of the patterns; (C) innovations dictated by the non-Arabic element.

A. General changes affecting sm internal plurals
(i) The number of internal plural patterns
Like all the dialects of Arabic, Maltese has greatly reduced the number of broken plural patterns from that of Old Arabic. While Arabic had about 30 patterns, most dialects have less than 15 (cf. Tomiche 1964:172). For Maltese, Aquilina (1959:229-251 and 1979:49-52) counts no less than 37 different forms, but he considers patterns as distinct merely on the criterion of a different vocalic sequence; Alex Borg (1978:278) brings the number down to a reasonable 15. My classification fixes the

number at 13, distinguishing between three levels of frequency: (a) two patterns being very rare, (b) five represented only by a limited class, and (c) the remaining six patterns which are very well represented (and which in fact are still productive with foreign material).

The reduction in the number of patterns is mainly the result of the historical fusion of different patterns which Maltese has effected together with the dialects of North Africa (as we shall see in patterns 9 and 11). Semitic Maltese has also developed one additional pattern (no. 14) on which I shall comment later.

(ii) Historical morphophonemic changes
As in other Arabic vernaculars, the internal plural patterns have undergone changes affecting mainly their vocalic content and hence their syllabic configuration:

(1) Changes affecting the *Quantity* of vowels are: (a) the loss of short unaccented vowels in open syllable (as in: Ar 1u'2u^{w}3 > M 12u^{w}3 (no. 8), e.g. /qu'lu^{w}b/ > /ʔlu^{w}b/; Ar ʔa1'2aa3 and 1i'2aa3 > M 12aa3 (no. 9), e.g. Ar /ʔatˤ'faal/ and /ki'baar/ > M /tfaal/, /kbaar/; (b) the shortening of long vowels in certain positions (e.g. Ar /ħiʲ'tˤaan/ > M /ħi'taan/, no. 7). One result is a great quantity of syllable-initial consonantal clusters which are the basis of developments to be described later.

(2) *Quality*: Due to several phonetic changes, such as ʔimaala and the conditioning of neighbouring consonants, vowel sequences are no longer clearly defined as in Arabic and we have a much wider range of vocalic sequences (e.g. no.11 Ar Ca'CaaCiC (a-aa-i) > M 'CCaaCvC (aa-a), (aa-e), (ii-a), (ii-e), as in /'snaanar/ 'fishing-hooks', /'slaaleb/ 'crosses', /'ǧwiila^ʔ/ 'wicker-baskets', /'msiimer/ 'nails').

(iii) Singular-to-plural correspondence

The singular-to-plural correspondences of Old Arabic have generally been maintained. However, probably due to its long period of isolation, Maltese has sometimes extended one plural pattern analogically at the expense of others (e.g. M /fʔaar/ 'poor', /'ilħna/ 'voices', /'kotba/ 'books', for Ar /fuqa'raaʔ/, /ʔal'ħaan/ and /'kutub/). This area still awaits a detailed study which will help to show whether these apparent idiosyncracies of Maltese are shared by other vernaculars of Arabic or whether they are the product of a morphology acting in isolation.

B. The internal plural patterns

What follows is a rapid review of the existing broken plural patterns of Maltese, with relevant comments only on the more salient features of development. In Table 1, the plural patterns are given in an ascending order of frequency as explained above. The Semitic Maltese plural types are found in the middle column, and the corresponding Arabic types and their frequency on the left. Classical Arabic forms are obviously used only as a point of reference. The column on the right indicates which of these types are found with Romance and English borrowings. The statistical data regarding the frequency of the Arabic patterns is based on Murtonen's well-known work (1964), while that for non-Semitic Maltese is based on my analysis of a near-exhaustive corpus of 558 plurals collected from everyday use of the language and from dictionaries. Unfortunately, statistical data for Semitic Maltese has not yet been compiled and in this case only the patterns are given.

Table 1: **ARABIC AND MALTESE INTERNAL PLURALS**

	AR PLUR. (tot. 9504)	SM PLUR. (-)	non-SM PLUR. (tot. 558)
1	1a2ⁱ3 (tot.16)	12ⁱ3	---
2	1u22aa3 (1.76%)	1v22*aa*3	---
3	ʔa12i3a ʔa12i3aaʔ ʔa12u3 (5.91%)	v123a	---
4	1u2uʷ3a (0.33%)	12uʷ3a	---
5	1a2aa3a(j) 1a2aa3aa (1.53%)	12*aa*3a	---
6	1a23a(j) 1u2a3aaʔ ʔa12i3aaʔ (3.06%)	1v23a	---
7	1u23aan 1i23aan (3.79%)	1v(2)3*aa*n	1v3*aa*n (1.05%)

8	$1u2u^w3$ (7.59%)	$12u^w3$	$12u^w3$ (4.04%)
9	$ʔa12aa3$ $1i2aa3$ (21.44%)	$12aa3$	$12aa3$ (4.39%)
10a.	$1a2aa3i^n$	$12aa3i$	$12aa3i$
b.	$ma1aa2i^n$ (0.31%)	$m1aa2i$	(6.50%)
11a.	$1a2aa3i4$ $1a2aa3i^j4$ (2.81%)	$12aa3v4$	$12aa3v4$ (20.39%)
b.	$1aWaa2i3$ $1aWaa2i^j3$ (6.45%)	$1Waa2v3$	$1Waa2v3$ (3.69%)
c.	$1a2aa2i3$ $1a2aa2i^j3$ (1.80%)	$12aa2v3$	$12aa2v3$ (12.30%)
d.	$ma1aa2i3$ $ma1aa2i^j3$ (9.01%)	$m1aa2v3$	$(12aa2v3)$
11	(all four sub-types together) CaCaaCiC CaCaaCi^{j}C (20.07%)	CC*aa*CvC	CC*aa*CvC (36.38%)

12	1a2aa²i3 (4.69%)	12vjjv3	12vjjv3 (9.14%)
13	1i2a3 1a2a3 1u2u3 1u2a3 1u23 (15.80%)	1v2v3	1v2v3 (37.26%)
14	--- (cf. ma1aa22)	m1v2v3	---

Patterns 1 and 2 (12vv3, 1v2'2aa3) are both very rare, each being represented by a couple of examples. Patterns 3 to 7 are represented only by a limited class of nouns or adjectives.

Pattern 3 ('v123a). Unlike most Maghrebinic dialects (cf. e.g. Marçais 1902:106, 1908:133), Maltese has not only preserved this pattern, but it has also extended it analogically at the expense of other patterns (e.g. /'ilħna/, /'o²bra/ for Ar /²al'ħaan/, /qu'buʷr/). It does not occur in Romance Maltese.

Pattern 4 ('12uʷ3a). This pattern comprises only a group of about 10 occurrences in Semitic Maltese (e.g. /'raħal/ 'village' - /'rħuʷla/).

Pattern 5 ('12aa3a) is likewise of limited frequency (e.g. M /²a'rⁱb/ 'relative' - /'²raaba/).

Pattern 6 ('1v23a) is not too common, but it comprises some very common words. In Maltese it has spread analogically,

sometimes replacing other patterns (e.g. M /ˈkotba/ 'books', /ˈǧodda/ 'new', /ˈᶜomja/ 'blind' for Ar /ˈkutub/, /ˈǧudud/, /ˈᶜumj/).

Pattern 7 (1v2ˈ3aan). This pattern is associated mainly with nouns of the type 1v23, especially with those having a weak second, and less frequently third, radical (e.g. /naar/ 'fire' - /niˈriin/, /ħajt/ 'wall' - /ħiūtaan/; /ˈħasi/ 'rooster' - /ħoˈsiin/). Since the variation in the stem of the singular form is often minimal, it has often been classified as a sound plural (with suffix /-aan/, i.e. -an̄ or -ien) by Maltese grammarians (cf. the Għaqda's *Tagħrif* 1924:72, Aquilina 1979:47). This pattern has been extended analogically to other Semitic Maltese words (e.g. /turˈǧiin/ 'flights of stairs', /siˈdiin/ 'owners', /ᶜotˈjiin/ 'lids') and also to a few borrowings displaying a monosyllabic singular form with a long vowel (e.g. RM /vi̇t/ 'tap' - /viˈtiin/; EM /šuᵂt/ 'chute' - /šuˈtiin/).

Pattern 8 (12uᵂ3). A very common plural pattern in Arabic, it remains so in Semitic Maltese and is also represented by a few nouns of Romance origin (e.g. SM /ʔalb/ 'heart' - /ʔluᵂb/, RM /čens/ 'lease' - /čnuᵂs/, /čint/ 'low wall' - /čnuᵂt/).

Pattern 9 (12aa3). As in many North African dialects (cf. Fischer-Jastrow 1980:91), this pattern represents the historical fusion of two very common Arabic schemes: ˈ1i2aa3 (e.g. /rǧiil/ 'men', /twaal/ 'tall' < /riˈǧaal/, /ṭiˈwaal/) and ʔa1ˈ2aa3 (e.g. /tfaal/ 'children', /sħaab/ 'partners' < /ʔaṭˈfaal/, /ʔaṣˈħaab/), following the loss of the initial syllable in both cases. Some non-S examples are: RM /červ/ 'deer' - /čriiv/, /serp/ 'snake' - /sriip/, /čuᵂč/ 'fool' - /čwiič/, and EM /buᵂc/ '(pair of) boots' - /bwiic/.

Pattern 10 (ˈ12aa3i). In his treatment of "L'affixation et la flexion interne" Henri Fleisch (1961:406) writes: "Préfixes et

suffixes sont soumis à la flexion interne: ou plutôt la flexion interne régit le mot entier... racine trilitère + préfixe ou suffixe forment une unité au point de vue morphologique: le squelette consonantique d'un seul mot". This explains why I chose to treat forms like 10a and 10b simply as variants of the same theme. While in Classical Arabic this plural is associated with nouns having weak-final roots, in Maltese as in many other dialects it has spread to feminine nouns harking back to /-aᵗ/. It is also quite common with non-Arabic feminine nouns of the pattern '1v23v (e.g. SM /'midra/ 'winnowing fork' - /'mdiiri/; /'darba/ 'time' - /'draabi/; /sid'ri̯ja/ 'waistcoat' - /'sdiiri/; RM /'ʔorti/ 'court' - /'ʔraati/; /'čirku/ 'circle' - /'čriiki/; /'saala/ 'hall' - /'swaali/; /čum'ni̯ja/ 'chimney' - /'čmiini/; EM /'kitla/ 'kettle' - /'ktiili/).

Pattern 11 ('12*aa*3v4). Like the previous pattern, this one is represented by four etymological types, marked <u>a-d</u>. In each of these variants, Maltese has effected the fusion of the old Arabic forms with long and short vowels (i.e. <u>1a2aa'3i̯4</u> and <u>1a'2aa3i4</u>) in favour of the latter, a development which is typical of North African sedentary dialects. This pattern represents more than a fifth of all broken plurals in Classical Arabic and is also very common in Semitic Maltese. Its even greater popularity with loanwords (over 36% of all broken plurals) can be explained by the fact that, as a quadriliteral pattern, it caters for loan stems having more than three consonants, which is often the case with Romance loans, though much less frequently with English stems.

An interesting innovation of Romance Maltese - though occurring sporadically also in some dialects - is the presence among singular types taking this plural of patterns with a doubled fourth consonant (e.g. /sel'vaǧǧ/ 'savage' - /'slaavaǧ/; /pin'cell/ 'brush' - /'pniicel/; /sar'vetta/ 'napkin' - /sriivet/). In 11b, with W inserted as second radical, Romance Maltese nouns with a long first or

even second vowel analogically yield an additional W as second consonant for pluralization (SM /ˈʔaabla/ 'midwife' - /ˈʔwiibel/, /ħaūnuʷt/ 'shop' - /ˈħwiinet/; RM /ˈšaabla/ 'sword' - /ˈšwaabel/; /taˈpi̇t/ 'carpet' - /ˈtwaapet/; /čaˈvetta/ 'key' - /čwiivet/). 11c, with doubled middle consonant, is also remarkable since in Maltese it sometimes forms the plural of simple triliteral nouns in both Semitic and Romance Maltese (e.g. SM /saˈli̇b/ 'cross' - /ˈslaaleb/, /ˈšafra/ 'blade' - /ˈšfaafar/, /ˈnitfa/ 'little' - /ˈntiitef/; RM /saˈpuʷn/ 'soap'- /ˈspaapen/, /ˈkamra/ 'room' - /ˈkmaamar/).

Pattern 12 ('12vjjv3) derives from Ar 1a'2aa2i3 which is mostly associated with feminine singular forms having a long vowel after the second radical. This correspondence is continued in Semitic Maltese and is further strengthened in Romance Maltese where nouns ending in -vvCa are very common (e.g. SM /ˈħraafa/ 'fable' - /ˈħrejjef/; RM /ˈskoola/ 'school' - /ˈskejjel/; /kaˈti̇na/ 'chain' - /ˈktajjen/; EM /ˈskuʷna/ 'schooner' - /ˈskejjen/).

Pattern 13 ('1v2v3). It is worth noting that while in most North African sedentary dialects the pattern is '12v3, Maltese displays the form with a stressed first vowel '1v2v3. This distinction finds a parallel also in the 3ms of the Perfect of verbs, which has the same form (e.g. 'he wrote': Maghreb /ˈkteb/, M /ˈkiteb/). Semitic Maltese plurals on this pattern are not too abundant, but it features as the most important internal plural pattern in modern Maltese mainly because of its popularity (over 37%) with Romance Maltese loanwords of the type 1v23a or 1v22a (e.g. /falc/ 'false' - /ˈfoloc/; /ˈfirma/ 'signature' - /ˈfirem/; /ˈkašša/ 'box' - /ˈkašeš/; /ˈrotta/ 'route' - /ˈrotot/).

C. Innovations
(i) From root-based form to syllabic form

The existence of sets of variants within one basic pattern (as in pattern 11 'CC*aa*CvC: /'zraaben/ 'shoes' 1234, /'slaaleb/ 'crosses' 1223, /'ʔwiibel/ 'midwives' 1W23, /'mħaazen/ 'stores' M123) suggests that, as hinted already in the quotation from Fleisch, in internal inflexion the original hierarchal distinction in the status of consonants between root and servile consonants gives way to a new status, that of "pattern consonants", putting them all on a par. This means that what originally was a root-based form is being reinterpreted as a syllabic sequence with a given prosodic pattern.

(ii) The consonant clustering process

One innovative pattern in Semitic Maltese (n° 14) seems to be a development based on the syllabic interpretation of an internal plural pattern. Nouns of instrument with a doubled root (e.g. /'mħadda/ 'pillow', /'mħakka/ 'grater', /'msella/ 'packing needle') which in Arabic - and to my knowledge also in vernacular Arabic - normally pluralize on Classical Arabic ma'1aa22 (e.g. Ar /maūxaadd/, SpAr (Corriente 1977: 93) /ma'xaadid/, Saïda (Marçais 1908:128) /mxaad/ < */'mxaadid/), in Maltese form their plural on the novel pattern 'm1v2v3 with a short first vowel. This pattern is clearly a development on broken plural pattern 13 '1v2v3, which is achieved through the syllabic interpretation of this canonical form. Thus, on /'fid-da/ 'silver' - /'fi-ded/, we get /'mħad-da/ - /'mħa-ded/. In this way, a consonant cluster now stands in the position of a single consonant without effecting any important changes to the syllabic configuration of the original form.

Through such consonant clustering at the beginning of the syllable, Maltese has managed to accommodate and partially

integrate a variety of foreign word-types (often with a heavy consonantal content) which otherwise would not have been acceptable. Note, e.g., how innovative plural patterns grow out of the traditional form in the examples in Table 2 (N.B. the relevant consonantal clusters are in italics):

Table 2: **CONSONANT CLUSTERING**
          AND MORPHOLOGICAL 'WINDOWS'

11 *Singular*	*Plural* **'12aa 3v4**	
SM ?an 'fuᵂd	'nii fed	'hedgehog'
RM bal 'luᵂn	'blaa en	'ball'
" *sk*ar 'paan	'*sk*raa pan	'shoemaker'
" pra '*sp*uᵂra	'praa *sp*ar	'oddity'

12 *Singular*	*Plural* **'12vj jv3**	
SM 'tiʲla	'ftej jel	'wick'
RM 'skoo la	'skej jel	'school'
EM '*sk*ruᵂ n	'*sk*rej jen	'screw-propeller'
RM '*str*iʲ na	'*str*ej jen	'New Year gift'
in - 'traa ta	in - 'traj jet	'hall, entrance'
per- 'sjaa na	per - 'sjaj jen	'window blind'

13 *Singular*	*Plural* **'1v 2v3**	
SM 'fid da	'fi ded	'silver'
'*mħ*ad da	'*mħ*a ded	'pillow'
qaw - 'sal la	qaw - 'sa lel	'rainbow'

RM	'kaš ša	'ka šeš	'box'
	'*vle*ğ ğa	'*vle* ğeğ	'arrow'
	'*skwe*r ra	'*skwe* rer	'set-square'
	bic - 'cil la	bic - 'ci lel	'lace'
	um- '*bre*l la	um - '*bre* lel	'umbrella'
	pozam - '*bre*l la	pozam - '*bre* le	'umbrella stand'

This process of consonant clustering has interesting parallels also in borrowed verbs (cf. Mifsud 1992:382-386).

It is remarkable that such innovative forms, while conforming to the traditional broken plural patterns in their syllabic configuration, move out of the Arabic model by virtue of their consonantal content, which is not reducible to 3 or 4 consonants. In this sense, they are the hybrid products of the linguistic cross-currents that weave the history of Maltese.

(iii) Morphological "windows"

It seems that, through the clustering process just described, the analogical force exerted on the loanword by the canonic pattern ends up affecting mainly the last part of the singular form, i.e. from the stress onward, while it releases its hold on the first part of the word, where the clustering more commonly occurs. This explanation is confirmed by a number of Maltese plurals in which whole syllables at the beginning of a singular word are left untouched (or better "unbroken"), while the broken plural pattern claims only the last part of the word. In other words, the last part forms what I may call a "morphological window" which is inflected regularly while the first part becomes a kind of pseudo-prefix unaffected by the inflexion, regardless of its etymological status (cf. Table 2). A phenomenon which may have supported such a development is the practice of inflecting only the second item of a composite word (often a hybrid) even

when it is not the semantic head of the expression (e.g. /bu-
°ar'wiin/ 'slug' - /bu-°e'riiwen/; /kontra-'bejt/ 'screed' - /kontra-
'bjuˠt/, /kontra-'forma/ 'mould' - /kontra-'forom/, /sopra-'terħa/
'altar-cloth' - /sopra-'triiħi/).

I believe that these plural forms, even though not too abundant,
represent an interesting stage of development in which a *modus
vivendi* is elegantly reached between the exacting internal
inflexion of Arabic and the concatenative morphology of the
borrowed lexeme. This might well be described as a new
morphological capacity of the Arabic dialect of Malta to tackle
polysyllables, which makes use of the native morphological
structures without accepting their limitations. The solution
achieved is especially noteworthy when one considers the
difficulty which a Semitic language encounters in integrating
plurisyllabic loans.

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