Number Marking in Maltese Nouns

KARINE DAVID

1 Introduction

Maltese is a Semitic language. It is one of the two official languages of the Maltese archipelago (along with English). Its particularity resides in a morphology, a syntax, and a morphosyntax partially inherited from Arabic. The lexicon is composed for 70 % of Maghrebin Arabic, 20 % of Italian, and 10 % of loan words particularly English. An other particularity is that Roman characters are used to write Maltese.

In this work we concentrate on noun morphology and especially on the realization of number in Maltese nouns. Aquilina (1965), Borg & Azzopardi-Alexander (1997), Fenech (1996), and Sutcliffe (1936) distinguish three realizations of number for the nouns in Maltese: singular, dual, and plural. The singular form is used to express one entity, the dual form is used to express two entities, and the plural form is used to express three entities and more. So the three numbers: one entity, two entities, and three entities and more can be expressed by three different morphological forms: singular, dual, and plural.

But actually not every noun possesses the three forms: singular, dual, and plural. Most of them only have two, and there is no connection between the three forms and the three semantic numbers; the singular form is not always used to express one entity, the dual form is not always used to ex-

press two entities, and the plural form is not always used to express three entities and more.

First we present the data and show different configurations between the three forms. Then we analyze different hypotheses to propose finally our own analysis to explain the realization of the three numbers in Maltese nouns.

2 The data

2.1 The classification

In Maltese we can distinguish three classes of nouns.

The nouns of the Class 1 & 2 use only two of the three inflected forms globally available. And the Class 3 uses the three inflected forms.

Class 1: nouns with two forms: singular - plural

Nouns of the Class 1 possess two forms: a singular form to express one entity and a plural form to express more than one entity (two entities or more than two entities).

	One entity	Two entities	Three entities and more
CLASS 1	*saltna* kingdom	*saltniet* kingdom-PL	*saltniet* kingdom-PL

Table 1: Class 1

For these nouns the plural form is used to refer to more than one entity as in French or in English.

Class 2: nouns with two forms: singular - dual

Nouns of the Class 2 possess two forms: a singular form and a dual form to express a plural number.

	One entity	Two entities	Three entities and more
CLASS 2	*id* hand	*idejn* hand-DU	*idejn* hand- DU

Table 2: Class 2

Authors underline that nouns of this class are names of body parts which are pairs, and that suffixed forms are not considered by Maltese

speakers as forms expressing precisely two entities, but as forms expressing a plural number (more than one entity). Fenech (1996) characterizes the suffix of dual in this case as a 'plural allomorph' and gives an example of a body part which is not a pair to illustrate clearly how the dual form can express a plural number.

1. a.   *difer*   b. *difr -ejn*
           nail (of finger or toe)   nail -DUAL
                                              nails

Class 3: nouns of three forms: singular -dual - plural

Nouns of the Class 3 possess three forms: a singular form, a dual form to express precisely a number of two entities, and a plural form to express a number of three entities and more.

	One entity	**Two entities**	**Three entities and more**
CLASS 3	*jum*	*jumejn*	*ijiem*
	day	day-DU	day-PL

Table 3: Class 3

Nouns possessing three numbers are semantically related to time, number, old Maltese weights, old Maltese measures, old Maltese coins, basic food, and some familiar objects.

In this class the dual form expresses precisely two entities. Fenech (1996) calls it 'real dual'.

We observe that the dual form of Class 3 is similar to the dual form of Class 2, and that the plural form of Class 3 is similar to the plural form of Class 1. So nouns in Class 3 possess a paradigm with three forms which are strikingly similar to the non-singular forms of Class 1 and 2.

	ONE ENTITY	**TWO ENTITIES**	**THREE ENTITIES AND MORE**
Class 1	Singular	Plural	Plural
Class 2	Singular	Dual	Dual
Class 3	Singular	Dual	Plural

Table 4: Recapitulation of the forms

2.2 The realization of the marks

In this section we analyze the marking of the singular, the dual, and the plural. Singular is unmarked, dual is marked by suffixation, and plural is marked by suffixation or by other processes.

Singular

The singular form of the noun is the unmarked form which is employed as the basis to form the dual and the plural.

Dual

The dual form is formed by addition of the suffix [-*ejn*] or [-*ajn*] to the base or to the singular form. [-*ejn*] or [-*ajn*] are two forms of the same suffix. The variation between the linking vowel [-*e*-] and [-*a*-] is phonologically conditionned:

<u>Rule</u>: e $\rightarrow$ a / C$_{[+back]}$ ____

2. *saq -ajn*
    [sa?-ajn]
    foot-DUAL

3. *riġl - ejn*
    [rid3l- ejn]
     leg -DUAL

We can find two variants for the dual suffix: [-*ej*-] and [-*aj*-], which are the reflex of the full forms [-*ejn*] and [-*ajn*] after the functioning of an apocope because of a further suffix, namely the attached pronominal pronoun. It is impossible to find a full form of the dual suffix preceding the attached pronominal pronoun.

4.   a. *saq-* <u>*aj*</u> *-* <u>*h*</u>   b.* *saq -* <u>*ajn*</u> *-* <u>*h*</u>
        foot-DUAL-POSS   foot-DUAL-POSS
        his feet

5.   a. *riġl-* <u>*ej*</u> *-* <u>*h*</u>   b.* *riġl-* <u>*ejn*</u> *-* <u>*h*</u>
        leg-DUAL-POSS   leg-DUAL-POSS
        his legs

6.   a. *id*
         hand

     b. *id -ejn*
         hand-DUAL
         hands

Plural

According to Sutcliffe, Aquilina, and Fenech, the plural of Maltese nouns can be classified into classes: suffixed plurals, broken plurals, and irregular plurals.

We find different types of suffixes to form the plural. Suffixes from Semitic origin:

7.   a. *qassis*
        priest

     b. *qassisin*
        priest-PL
        priests

8.   a. *saltna*
        kingdom

     b. *saltniet*
        kingdom-PL
        kingdoms

9.   a. *sid*
        owner

     b. *sidien*
        owner-PL
        owners

10. a. *ħaddied*
        blacksmith

     b. *ħaddieda*
        blacksmith-PL
        blacksmiths

Suffixes from Italian:

11. a. *ġurnal*
        newspaper

     b. *ġurnali*
        newspaper-PL
        newspapers

Suffixes from English:

12. a. *kompjuter*
        computer

     b. *kompjuters*
        computer-PL
        computers

Broken plurals mean that they involve an internal change:

13. a. *but*   b. *bwiet*
        pocket   pocket-PL
                            pockets

Irregular plurals or suppletive plurals involve a different radical from that of the singular:

14. a. *mara*   b. *nisa*
        woman   woman-PL
                            women

2.3 Summary

There are different ways to form the dual and the plural, but in all the cases we meet a problem with the configuration: Singular-Plural-Plural of the Class 1 which uses the plural forms to express entities above 1 and with the configuration: Singular-Dual-Dual of the Class 2 which uses the dual form to express two entities, but expresses three entities and more too.

3   Analysis

First we explore hypotheses to find an analysis making clear the situation of the three numbers realization on the Maltese nouns, considering the occurrence of the three numbers and considering that very few nouns possess one particular form for each number. And finally we propose a solution.

3.1 Exploring hypotheses

H 1:   One could postulate a three slot paradigm for nouns of the three classes with two defective classes (1&2).

	Singular	Dual	Plural
Class 1	+		+
Class 2	+	+	
Class 3	+	+	+

Table 5: Paradigm of three slots

It would mean that nouns of Class 1 could not express two entities and nouns of Class 2 could not express more than two entities. This is clearly not the case:

15. *it -tnejn   itfal*[1]
    det-two   children
    the both children

16. *l -għaxart   idejn*
    det- ten   hands
    the ten hands

In 15. a nominal phrase for a noun of Class 1 expresses two entities and in 16. a nominal phrase of a noun of Class 2 expresses ten entities.

H 2:   'Number for Maltese nouns is just an opposition of singular versus non-singular' as proposed by Corbett (2000). According to Corbett the noun paradigm has two slots. Class 3 is a deviant category, another type of noun, which possesses a minor number.
On the one hand, this makes sense of the majority of nouns and clearly defines Class 3 as an exception. On the other hand, it does not account for the identity between the non-singular forms of Class 1 and 2 with the dual and plural forms of Class 3.

	Singular	Non-singular
Class 1	*saltna*	*saltniet*
Class 2	*id*	*idejn*

Table 6: Singular/non-singular

	Singular	Dual	Plural
Class 3	*jum*	*jumejn*	*ijiem*

Table 7: Class 3

H 3:   As it is uncommon to find several paradigms for the members of the same grammatical category, especially with identical forms, we postulate that each noun of each class possesses three forms but that the forms are not always different. Note that the similarity be-

---

[1] The form of the plural is normally *tfal* but the euphonic *i* is present because a word can not begin with two consonants if the final letter of the previous word is a consonant.

tween two forms in a paradigm is not rare. The example *meine Mutter* in German can be nominative or accusative because the form of the possessive determiner is similar for each case. In French most adjectives possess the same form for the masculine and the feminine: *extraordinaire, large, authentique, humide…*

Moreover, there is no agreement in dual between the noun and the adjective or between the noun or the verb; agreement is in plural. It means that no element other than the noun distinguishes dual from plural.

17. a. *ijiem sbieħ se   jiġu*   b. *jum -ejn   sbieħ   se   jiġu*
  days   nice   FUT come   day-DUAL nice   FUT come
        3ᵉP.PL   3ᵉP.PL
  nice days will come   two nice days will come

In this situation each form possesses its particular meaning and its particular morphological form. The three classes are homogenous and there is no defection.

3.2 Proposition of solution

We propose that Class 1 possesses three forms but that the dual form is similar to the plural form, and that Class 2 possess three forms but that the plural form is similar to the dual form. To obtain this result we use rules of referral as defined by Zwicky (1991).

Rule A: to form the dual of the nouns of the Class 1 refer to the plural.
Rule B: to form the plural of the nouns of the Class 2 refer to the dual.

	SINGULAR	**DUAL**	**PLURAL**
Class 1	*saltna*	←———	*saltniet*
Class 2	*id*	*idejn* ———	→
Class 3	*jum*	*jumejn*	*ijiem*

Table 8: "Rules of referral"

We choose the form for the particular meaning we want to express. Note that the analysis we propose is not based on the similarity of the forms because the principle of the rules of referral is to do a copy of the form to create another form. We obtain a description without defective paradigms where the similarity of non-singular forms of Class 1 and 2 with dual and plural forms of Class 3 is captured.

	SINGULAR	DUAL	PLURAL
Class 1	*saltna*	*saltniet*	*saltniet*
Class 2	*id*	*idejn*	*idejn*
Class 3	*jum*	*jumejn*	*ijiem*

Table 9: Solution

In the framework of Stump (2001) we could modelize this proposal with a single block, called block 1, containing the following five rules:

Block 1:

$X_{N,}\sigma$: {NB Sg}$\rightarrow$ X
$X_{N,}\sigma$: {NB Du}$\rightarrow$ X$\oplus$ejn
$X_{N,}\sigma$: {NB Pl}$\rightarrow$ X$\oplus$iet
$X_{N\text{-}CL1,}\sigma$: {NB Du}$\rightarrow$ <X,σ/{NB Pl}>: 1
$X_{N\text{-}CL2,}\sigma$: {NB Pl}$\rightarrow$ <X,σ/{NB Du}>: 1

The first rule specifies that the singular of a noun is the basic form (un-marked). The second rule forms the dual of a noun in suffixing [-ejn] to the base. The third rule forms the plural in suffixing [-in] to the base. And the two last rules are rules of referral which correspond respectively to:

- to form the dual of the nouns of Class 1 refer to the realization of the plural number in block 1
- to form the plural of the nouns of Class 2 refer to the realization of dual number in block 1.

The analysis explains the distribution of the three numbers but does not account for irregular plurals. This could be accommodated by using stem-space developed by Bonami & Boyé (2003) in the following of Pirelli and Battista (2000). Each noun would possess two stems: Stem1 to form the singular and the dual and Stem2 to form the plural.

SINGULAR	DUAL	PLURAL
Stem1	Stem1$\oplus$ejn	Stem2

Table 10: Forms of the stem-space of the nouns in Maltese

4   Conclusion

The proposal presented in this paper gives an identical paradigm for every noun if we use the rules of referral. Moreover, Fenech (1996) and Corbett (2000) would agree on this analysis, and it makes sense of the idea that a class would possess a homogenous paradigm. However it would be more convenient if Class 1 would be unmarked and if Class 3 would be marked.

5   References

Aquilina, J. 1965. *Teach Yourself Maltese*. London : First Edition : Hodder Headline Plc.

Blanc, H. 1970 *a*. Dual and pseudo-dual in the Arabic dialects, *Language* 46 : 42-57.

Bonami, O., Boyé, G. 2003. Supplétion et classes flexionnelles dans la conjugaison du français, *Langages* 152 : 102–126.

Borg, A., Azzopardi-Alexander, M. 1997. *Maltese, Descriptive Grammars*. Series Editor : Bernard Comrie : Université du Sud de la Californie.

Corbett, G. G. 2000. *Number.* Cambridge : Cambridge University Press.

Fenech, E. 1996. Functions of the Dual Suffix in Maltese, *Rivista di Linguistica* 8.1. : 89-99.

Hetzron, R. 1997. *The Semitic Languages*. New York : Routledge.

Hockett, C. F. 1958. *A Course on Modern Linguistics.* New York : The McMillan Compagny.

Jakobson, R., Fant, G. C. and Halle, M. 1952. *Preliminaries to Speech Analysis. The distinctive features and their correlates.* Edition 1967, Cambridge : The MIT Press.

Lipinski, E. 1997. *Semitic Languages Outline of a Comparative Grammar*. Louvain.

Martinet, A. 1965 *a*. *Eléments de linguistique générale*. Paris : Armand Colin.

Matthews, P. H. 1974. *Morphology*. 2^d ed., 1991, Cambridge : Cambridge University Press.

Pirrelli, V., Battista, M. 2000. The paradigmatic dimension of stem allomorphy in italian verb inflection, *Rivista di linguistica* 2 (12) : 307–380.

Plank, F. 1996. Domains of the dual, in Maltese and in general, *Rivista di Linguistica* 8.1. : 23-40.

Stump, G. 2001. *Inflectional Morphology*. Cambridge : Cambridge University Press.

Sutcliffe E. D., 1936, *A Grammar of the Maltese Language*, Valletta, Progress Press.

Zwicky A. M., 1991, Paradigms - The Economy of Inflection, *Empirical Approaches to Language Typology* 9 : 113-131.