How (ir)regular is the *binyan* system in Maltese?

In terms of stem structure and derivational potential, Maltese verbs can be divided synchronically into two classes, **templatic** and **concantenative**. This paper pivots around the morphological and lexical semantic aspects of templatic verbs in Maltese, a relatively closed class of verbs formed by the combination of **roots**, discontinuous morphemes of three or four consonants in fixed sequence, and ***binyanim***, morphological templates with a specific syllabic structure, which consist of (i) slots for the root constants to fit in, (ii) vowels, some of which are inherent to particular patterns, and in some cases (iii) affixes. Templatic verbs are mostly of Semitic origin. A larger number are derived from Romance and English and are reanalyzed according to the syllabic structures of existing forms, allowing them to participate in the derivational processes available to indigenous verbs (cf. Mifsud 1995; Hoberman & Aronoff 2003; Hoberman 2007).

There are 11 *binyanim* in Maltese: 9 for triconsonantal, 2 for quadriconsonantal roots. No single triconsonantal root appears in all of the 9 *binyanim*. Unlike inflectional morphology, which is associated with the grammar, *binyanim* are associated with the lexicon, and they manifest the irregularities and accidental gaps typical of derivational morphology. In the literature on the topic (Sutcliffe 1936; Mifsud 1995; Borg & Azzopardi-Alexander 1997; inter alia), *binyanim* have been characterized in terms of:

(a) **transitivity**: some are inherently intransitive, some are predominantly transitive or intransitive, and other may host either transitive or intransitive verbs;

(b) **semantic roles**: every *binyan* is assumed to be associated with one or two meanings, e.g. *binyan* [C1vC2C2vC3] is the "causative" or "intensive" of *binyan* [C1vC2vC3], and [tC1vC2C2vC3] is the "passive and/or reflexive" of [C1vC2C2vC3].

Grammatical descriptions have so far taken into account the properties of individual *binyanim*, trying to find a direct correlation between semantic and syntactic properties of verbs, and their morphological form, in order to characterize *binyanim* in semantic terms (e.g. causative, reflexive). There do exist some tendencies for certain verb types to appear in particular patterns. However, the neat association of patterns with semantic roles is inadequate, as there are no strict relations between single *binyanim* and single roles.

The focus of this study is not on individual patterns, but on the pattern system as a whole (for a similar approach, cf. BORG 1981, 1988). I argue that regularity in the verbal system is not to be found in the association of individual patterns with individual semantic roles, but rather in the system of relations that hold between *binyanim*. What generalizations and regularities, if any, can be found in the pattern system? The aim of this analysis is to provide a coherent theory that (i) explains the gaps systematically (ii) by formalizing the interaction of roots and patterns, and (iii) finding regularity in the system of relations between *binyanim*.

I give a quantitative and qualitative analysis of *binyanim* in Maltese. A quantitative analysis, based on a corpus of around 1,800 verb-creating roots and the patterns they appear in, reveals that roots fall into a number of categories, the main two being **argument alternations** and **multiple interpretations**. Two

occurrences of a root in two different *binyanim* correlate with either semantically transparent alternations such as active-passive (e.g. √ktb: *kiteb* 'write' – *nkiteb* 'be written'), causative-inchoative (e.g. √ħll: *ħall* 'melt (tr.)' – *nħall* 'melt (intr.)'), or with two different interpretations in the environment of two patterns (e.g. √xrb: *xorob* 'drink' – *xarrab* 'wet' – *nxtorob* 'shrink'; √tlq: *telaq* 'leave' – tellaq 'race' – *ntelaq* 'let oneself go'). The *binyanim* system therefore has a dual role. It simultaneously marks argument alternations (regular aspect) and creates multiple verbs from a single root (irregular aspect).

How much regularity and irregularity does the system manifest? The analysis seeks to determine (i) how many instances of argument structure alternations (rather than instances of some other phenomenon) the *binyanim* system has, (ii) which alternations exactly the system has, and (iii) how they pattern with different *binyanim*. Among the issues addressed are:

- regularity in the morphological realization of these alternations within the *binyan* system: Which patterns may mark argument alternations? Do the alternations follow strict rules, e.g., appear in certain *binyanim* but not others, or is there a degree of freedom in morphological marking?
- direction of derivation: Which alternant is morphologically basic/unmarked and which is complex/marked? When the same form is used for both variants, how does one establish direction of (syntactic) derivation?
- syncretism of anticausative/passive/reflexive alternants: What degree of syncretism is found in the pattern system?

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