Stem allomorphy in Maltese verbs
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Co-ordinator of programme for
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• **Member** of the
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  within the Council

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  L-Għaqda Internazzjonali tal-Lingwistika Maltija
  (Għilm) founded in Bremen in November 2007

• **Chairman** of a
  Committee on Maltese in the Broadcasting Media
1. The language situation in Malta
2. Maltese
3. The verb system
4. Stem allomorphy: the facts
5. Stem allomorphy: accounting for the facts (some speculative ideas)
The language situation in Malta
The language situation in Malta

English BE/AE

borrowing (mainly lexical)

Maltese Standard and dialects

Maltese mixed with ME

Italian

Maltese ME mixed with Maltese

ME mixed with Maltese

Maltese English

Close to BE/AE

Further from BE/AE

L1 L2 EFL
The Constitution

Section 5 [National Language], chapter I: the "national language of Malta is the Maltese language"

with "the Maltese and the English languages" as "the official languages of Malta"
Official languages:

"the Administration may for all official purposes use any of such languages… The language of the courts shall be the Maltese language" and "the House of Representatives may, in regulating its own procedure, determine the language or languages that shall be used in Parliamentary proceedings and records."
L-ILSIEN MALTI
df-tongue Maltese

THE MALTESE
LANGUAGE
Ahbarijiet | 24 ta’ Awwissu 2008

Nr 95
Il-vjaġġ politiku tal-ewroxettika
Sharon Ellul Bonici
Minn le ghal ‘iva’
Julia Farrugia
Kienet parti mill-kampanja ‘Le ghall-UE’ fl-2003 u ikkontestat l-elezzjoni ta’ dik is-sena mal-MLP.
Sena wara ttantat tkun kandidata ghall-MLP fl-elezzjoni tal-Parlament Ewropew imma twaqqfet mill-Bord tal-Viġilanza.
(Aqra Iktar)

Intervista
Il-pastażati fid-demm
Franica Pulis
tintervista lil Gianni Zammit

Download the front page of ILLUM in PDF format
Email:
illum@mediatoday.com.mt
Clip from national television programme about the Maltese language with well known local personalities.

1. Peppi Azzopardi: popular TV presenter
2. Manwel Mifsud: chairman of the National Council for the Maltese Language
3. Olvin Vella: executive secretary of the Council
4. Trevor Zahra: a well known Maltese author
5. Lou Bondi: the presenter
2. Extract from the newspaper *It-Torċa* (30/4/2006)

Noel Turner kien il-mutur tal-Blues f'nofs il-grawnd fejn wettaq ġafna *xogħol utli*, imma Valletta dehru *jikkontrollaw* tajjeb, minkejja li bdew *mingħajr* Sullivan u Fenech, li lanqas biss kienu fost is-*sostituti*... l-ewwel taqsima ... ntemmet mingħajr gowls.

([http://www.it-torca.com/](http://www.it-torca.com/))

Noel Turner was the Blues’ motor in midfield, where he did some very useful work; but Valletta seemed to control the game well, although they started without Sullivan and Fenech, who were not even present among the substitute players... The first half ended without any goals.
### 3. Vocabulary

<table>
<thead>
<tr>
<th>Term</th>
<th>English</th>
<th>Italian</th>
</tr>
</thead>
<tbody>
<tr>
<td>utli</td>
<td>useful</td>
<td>utile/i</td>
</tr>
<tr>
<td>jikkontrollaw</td>
<td>they control</td>
<td>controllare</td>
</tr>
<tr>
<td>sostitut</td>
<td>substitute</td>
<td>sostituto/i</td>
</tr>
<tr>
<td>Blues</td>
<td>the Blues</td>
<td>English: Blues</td>
</tr>
<tr>
<td>grawnd</td>
<td>ground/pitch</td>
<td>English: ground</td>
</tr>
<tr>
<td>gowls</td>
<td>goals</td>
<td>English: goal/s</td>
</tr>
<tr>
<td>nofs</td>
<td>middle</td>
<td>Arabic: nusf (half)</td>
</tr>
<tr>
<td>xoghol</td>
<td>work</td>
<td>Arabic: xuğl (work)</td>
</tr>
<tr>
<td>mingḥajr</td>
<td>without</td>
<td>Arabic: min (from) + ġajr (exception)</td>
</tr>
</tbody>
</table>
INFLECTIONAL FORMS
MALTESE VERBS
An overview:
some basic facts
1. No infinitive form

Every verb marked for person, number, gender (though not tense and aspect)
e.g. t-rid 'she wants'
    3fsg-want

Anna t-rid t-mur t-iżfen
Anna 3fsg-want 3fsg-go 3fsg-dance
Anna wants to go dancing

Anna ried-et t-mur t-iżfen
Anna want-3fsg 3fsg-go 3fsg-dance
Citation form

- traditionally:
  3msg.perf (unmarked)
  e.g. kiel 'he ate'/'to eat'

- colloquially:
  2sg.imperf (= 3fsg.imperf)
  e.g. t-iekol 'you eat'/'to eat'
2. The vowel melody

Vowels in Maltese are not morphemes in the same sense as in Arabic.
MSA

Vowel melody identifies aspect (im/perfective) and voice (passive/active)

<table>
<thead>
<tr>
<th></th>
<th>Perfective</th>
<th>Perfective</th>
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<tbody>
<tr>
<td>I</td>
<td>katab</td>
<td>kutib</td>
</tr>
<tr>
<td>II</td>
<td>kattab</td>
<td>kuttib</td>
</tr>
<tr>
<td>III</td>
<td>kaatab</td>
<td>kuutib</td>
</tr>
<tr>
<td>IV</td>
<td>~ aktab</td>
<td>~ uktib</td>
</tr>
<tr>
<td>V</td>
<td>takattab</td>
<td>tukuttib</td>
</tr>
<tr>
<td>VI</td>
<td>takaatab</td>
<td>tukuutib</td>
</tr>
<tr>
<td>VII</td>
<td>nkatab</td>
<td>nkutib</td>
</tr>
<tr>
<td></td>
<td>etc.</td>
<td></td>
</tr>
</tbody>
</table>

\[ a \quad u-i \]
<table>
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<tr>
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<th>Perfective</th>
<th>Perfective</th>
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<td>I</td>
<td>ikser</td>
<td>kiser</td>
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</tr>
<tr>
<td>II</td>
<td>ikisser</td>
<td>kisser</td>
<td></td>
</tr>
<tr>
<td>VI</td>
<td></td>
<td></td>
<td>tkiisser</td>
</tr>
<tr>
<td>VII</td>
<td></td>
<td></td>
<td>nkiser</td>
</tr>
</tbody>
</table>

vowel melody: $i – e$ throughout
However vowels do sometimes carry grammatical information
Paradigm

Triliteral weak  e.g. bies  b w s  'kiss'

<table>
<thead>
<tr>
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<th>PERFECTIVE</th>
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<th>IMPERFECTIVE</th>
<th></th>
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<tbody>
<tr>
<td></td>
<td>SINGULAR</td>
<td>PLURAL</td>
<td>SINGULAR</td>
<td>PLURAL</td>
</tr>
<tr>
<td>1</td>
<td>(i)n-`bus</td>
<td>(i)n-`bus-u</td>
<td>1</td>
<td>`bis-t</td>
</tr>
<tr>
<td>2</td>
<td>`t-bus</td>
<td>`t-bus-u</td>
<td>2</td>
<td>`bis-t</td>
</tr>
<tr>
<td>3f</td>
<td>`t-bus</td>
<td>(i)-`bus-u</td>
<td>3f</td>
<td>`bies</td>
</tr>
<tr>
<td>3m</td>
<td>i-`bus</td>
<td></td>
<td>3m</td>
<td>`bies-et</td>
</tr>
</tbody>
</table>

u: = [-perf]
   = [-3, +perf]
:  = [+3, +perf]
Paradigm

Triliteral weak  sab  s j b  'find'

<table>
<thead>
<tr>
<th></th>
<th>PERFECTIVE</th>
<th></th>
<th>IMPERFECTIVE</th>
</tr>
</thead>
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<tr>
<td></td>
<td>SINGULAR</td>
<td>PLURAL</td>
<td>SINGULAR</td>
</tr>
<tr>
<td>1</td>
<td>(i)n-`sib</td>
<td>(i)n-`sib-u</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>(i)s-`sib</td>
<td>s-`sib-u</td>
<td>2</td>
</tr>
<tr>
<td>3f</td>
<td>(i)s-`sib</td>
<td>i-`sib-u</td>
<td>3f</td>
</tr>
<tr>
<td>3m</td>
<td>i-`sib</td>
<td></td>
<td>3m</td>
</tr>
</tbody>
</table>

i:  = [-perf]
I  = [-3, +perf]
:  = [+3, +perf]
Classification of verb
(see also Mifsud 1994)
Stem allomorphy

1. display stem variation

2. do not display stem variation
Stem variation

seraq 'steal'

<table>
<thead>
<tr>
<th>ni-sraq</th>
<th>ni-sirq-u</th>
<th>seraq</th>
</tr>
</thead>
<tbody>
<tr>
<td>1(sg)-steal</td>
<td>1-steal-pl</td>
<td>steal(3msg)</td>
</tr>
<tr>
<td>I steal</td>
<td>we steal</td>
<td>he stole</td>
</tr>
<tr>
<td>-CCVC</td>
<td>-CVCC-</td>
<td>CVCVC</td>
</tr>
<tr>
<td>Verb Form</td>
<td>Meanings</td>
<td></td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>n-iffawlja</td>
<td>'foul (in football)'</td>
<td></td>
</tr>
<tr>
<td>1(sg).impf-foul</td>
<td>I foul</td>
<td></td>
</tr>
<tr>
<td>1.impf-foul-pl</td>
<td>We foul</td>
<td></td>
</tr>
<tr>
<td>foul-1sg.prf</td>
<td>I fouled</td>
<td></td>
</tr>
</tbody>
</table>
Semitic vs non-Semitic

1. Arabic/Semitic Maltese: root based
   nefaq 'spend', ġaseb 'think', farfar 'dust', bies 'kiss'

2. Non-Arabic/Semitic Maltese: stem based
   ittajpja 'type', ixxottja 'kick', issevja 'save', spjega 'explain', stabbilixxa 'establish'
Classification of verbs of Arabic origin

1. Triliteral
   seraq 'steal'
   CVCVC

2. Quadriliteral
   kaxkar 'drag'
   CVCCVC
Triliteral

1. simple
   niżel 'descend'    inżel (imperative)
   \[ C_i V C_j V C_k \]

2. reduplicative (*trux 'deaf')
   xamm 'smell'       xomm (imperative)
   \[ C_i V C_j C_j \]
Triliteral simple

1. strong $C =/= j/w$
   kiteb 'write' ikteb
   $C_i \ C_j \ C_k$

2. weak at least one $C = j/w$
   wasal 'arrive' asal
   $W \ C_i \ C_j$
Triliteral weak

1. assimilated *xebbiehi*
   wiret 'inherit'  iret  wirt 'an inheritance;'
   \(W \ C_i \ C_j\)  (initial ‘w’, rarely ‘j’)

2. hollow *moḥfi*
   bies 'kiss'
   \(C_i \ W/J \ C_j\)  (medial ‘w/j’)

3. lacking *nieqes*
   kera 'rent'
   \(C_i \ C_j \ J/W/\text{alif}\)  (final ‘j/w’)

\[
\begin{array}{ll}
\text{wiret 'inherit'} & \text{iret wirt 'an inheritance;'} \\
W & C_i \ C_j \ (\text{initial ‘w’, rarely ‘j’}) \\
\text{bies 'kiss'} & \text{bus bewsa 'a kiss'} \\
C_i \ W/J \ C_j \ (\text{medial ‘w/j’}) \\
\text{kera 'rent'} & \text{ikri kirja 'a rent'} \\
C_i \ C_j \ J/W/\text{alif} \ (\text{final ‘j/w’})
\end{array}
\]
4. silent final C (= għ)

sema’ ‘hear’ isma'

semagħ-ha ‘he heard her’

\( C_i \ C_j \ G{\text{ħ}} \)

third radical assumed to be silent ‘għ’

NB.

strictly speaking not weak but pattern with weak lacking
Quadriliterals

1. simple
   fixkel 'obstruct/confuse' fixkel
   C V C C V C

2. reduplicative
   farfar 'dust' farfar
   C_iVC_j C_iVC_j

Cmp. 2^{nd} form verbs: e.g. ḥarrab 'help to escape'
(see below)
'Irregular'

(mainly through historical loss of some C)

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>kiel</td>
<td>‘eat’</td>
<td>kul</td>
<td></td>
</tr>
<tr>
<td>ħa</td>
<td>‘take’</td>
<td>ħu</td>
<td></td>
</tr>
<tr>
<td>ra</td>
<td>‘see’</td>
<td>ara</td>
<td></td>
</tr>
<tr>
<td>ġie</td>
<td>‘come’</td>
<td>ejja</td>
<td></td>
</tr>
<tr>
<td>af</td>
<td>‘know’</td>
<td>af</td>
<td></td>
</tr>
<tr>
<td>mar</td>
<td>‘go’</td>
<td>mur</td>
<td></td>
</tr>
<tr>
<td>qal</td>
<td>‘say’</td>
<td>ġhid</td>
<td></td>
</tr>
<tr>
<td>ta</td>
<td>‘give’</td>
<td>aḡhti</td>
<td></td>
</tr>
</tbody>
</table>
Non-Arabic/Semitic: Romance verb, Semitic model

Type 1
kanta 'sing' kanta

Patterns inflectionally with Semitic triliteral weak lacking, e.g. qara ‘read’

hu  `qa ra  ‘read’
hu  `kan ta  ‘sing’

jien `qr-ajt  ‘I read’  hi 'qra-t  [raat]
jien  kan `t-ajt  ‘I sang’  hi  kan 'ta-t  [kantaat]
Type 1 sub-class

initial consonant gemination

ikkonvinča ‘convice’ (ital. convincere)
immoniterja ‘monitor’ (eng. ‘monitor’)
ittajpja ‘type’ (eng. ‘type’)

Not every loan verb has gemination:
e.g. kanta NOT *kkanta
    spjega NOT *sspjega
jien n-immoniterja ‘I monitor’
int t-immoniterja ‘you monitor’
hu j-immoniterja ‘he monitors’
hi t-immoniterja ‘she monitors’

jien immoniterja-jt ‘I monitored’
int immoniterja-jt ‘you monitored’
hu immoniterja ‘he monitored’
hi immoniterja-t ‘she monitored’
Non-Arabic/Semitic: Romance verb, Semitic model

Type 2
Patterns inflectionally with Semitic triliteral weak lacking e.g. beda ‘begin’

hu 'fal la ‘he was absent’
hu 'be ka ‘he cried’

jien fal 'l-ejt ‘I was absent’ hi fall-iet 'she was ...'
jien 'bk-ejt ‘I cried’ hi bk-iet 'she cried'
Type 2 sub-class
based on Italian -isco extensional verb

<table>
<thead>
<tr>
<th>Language</th>
<th>Form</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ital.</td>
<td>sugger-ire</td>
<td>‘suggest’</td>
</tr>
<tr>
<td>malt.</td>
<td>is-suġ ge 'r-ix xa</td>
<td>‘suggest’, ‘he suggested’</td>
</tr>
<tr>
<td>ital.</td>
<td>sugger-isc-o</td>
<td>‘I suggest’</td>
</tr>
<tr>
<td>malt.</td>
<td>n-is suġ ge 'r-ix x-i</td>
<td>‘I suggest’</td>
</tr>
<tr>
<td>ital.</td>
<td>sugger-iamo</td>
<td>‘we suggest’</td>
</tr>
<tr>
<td>malt.</td>
<td>n-is suġ ge 'r-ix x-u</td>
<td>‘we suggest’</td>
</tr>
<tr>
<td>ital.</td>
<td>sugger-ii</td>
<td>‘I suggested’</td>
</tr>
<tr>
<td>malt.</td>
<td>is suġ ge 'r-ejt</td>
<td></td>
</tr>
<tr>
<td>ital.</td>
<td>sugger-í</td>
<td>‘s/he suggested’</td>
</tr>
<tr>
<td>malt.</td>
<td>is suġ ge 'r-ix xa</td>
<td>‘he suggested’</td>
</tr>
</tbody>
</table>
Consonant clusters

Unlike Arabic, Maltese allows consonant clustering in loan verbs

*skan ta* ‘be surprised/stare’

*kom pla* ‘continue’
Non-Arabic/Semitic: Romance verb, Semitic model

Type 3
denominal verb of form 2

ital. serpente 'snake'
malt. serp 'snake'
verb: serrep 'to meander' (2nd form)

ital. pipa 'pipe'
malt. pipa 'pipe'
verb: pejjep 'to smoke'
Inflectional vs. derivational forms

1. Derivation:
   il-forom (binyanim, conjugations, themes)

2. Inflection
   verb inflected for person, number, gender
il-forom

derivational forms
<table>
<thead>
<tr>
<th>triliteral</th>
<th>quadri-literal</th>
</tr>
</thead>
<tbody>
<tr>
<td>noun/adj.</td>
<td>daḥla entrance</td>
</tr>
<tr>
<td></td>
<td>fehma opinion</td>
</tr>
<tr>
<td></td>
<td>laqgħa meeting</td>
</tr>
<tr>
<td></td>
<td>qatla kill/murder</td>
</tr>
<tr>
<td></td>
<td>nebħa insight</td>
</tr>
<tr>
<td></td>
<td>ħaḡra rock</td>
</tr>
<tr>
<td></td>
<td>abjad white</td>
</tr>
<tr>
<td></td>
<td>tḥarbita mix up</td>
</tr>
<tr>
<td>2. CVCCVC</td>
<td>daḥḥal let in</td>
</tr>
<tr>
<td></td>
<td>ħa</td>
</tr>
<tr>
<td>3. CVVCVC</td>
<td>fiehem explain</td>
</tr>
<tr>
<td>4. ra 'see'</td>
<td>4.</td>
</tr>
<tr>
<td>5. tCVCCVC</td>
<td>tdaḥḥal be inserted</td>
</tr>
<tr>
<td></td>
<td>tra ṭḥarbat</td>
</tr>
<tr>
<td>6. tCVVCVC</td>
<td>tqaṭel wrestle</td>
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<tr>
<td>7. nCVCVC</td>
<td>ndaḥal interfere</td>
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<tr>
<td>8. CtVCVC</td>
<td>fiehem agree</td>
</tr>
<tr>
<td>9. CCVVC</td>
<td>stenbaḥ wake up</td>
</tr>
<tr>
<td>10. stVCCVC</td>
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</table>
inflectional forms
Tense and aspect forms

tense marker *kien*
aspectual particles

<table>
<thead>
<tr>
<th>Tense and aspect forms</th>
<th>n-israq</th>
<th>‘I steal’</th>
<th>habitual</th>
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</thead>
<tbody>
<tr>
<td>present</td>
<td>qed n-israq</td>
<td>‘I am stealing’</td>
<td></td>
</tr>
<tr>
<td>progressive present</td>
<td>sa n-israq</td>
<td>‘I am going to steal’</td>
<td></td>
</tr>
<tr>
<td>prospective</td>
<td>kon-t qed n-israq</td>
<td>‘I was stealing’</td>
<td>past progressive</td>
</tr>
<tr>
<td></td>
<td>kon-t sa n-israq</td>
<td>‘I was going to steal’</td>
<td>past prospective</td>
</tr>
</tbody>
</table>
Two basic inflectional verb paradigms

1. prefixing (imperfective)
   
   \textit{aff}-israq
   n-israq
   1sg-steal 'I steal'

2. suffixing
   
   sraq-\textit{aff}
   (perfective)
   sraq-t
   steal-1sg 'I stole'
In the following, I will focus on the variation in verb forms within the two basic inflectional paradigms.
Comparing the paradigms of:

triliteral strong
e.g. kiteb k-t-b 'write'

and

triliteral weak
e.g. tar t-j-r 'fly'
Paradigm
triliteral strong   e.g. kiteb   k-t-b 'write'

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<td></td>
<td>SINGULAR</td>
<td>PLURAL</td>
</tr>
<tr>
<td>1</td>
<td>'ktib-t</td>
<td>'ktib -na</td>
</tr>
<tr>
<td>2</td>
<td>'ktib-t</td>
<td>'ktib -tu</td>
</tr>
<tr>
<td>3f</td>
<td>'kit b-et</td>
<td>'kit b-u</td>
</tr>
<tr>
<td>3m</td>
<td>'ki teb</td>
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<td>PLURAL</td>
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<td>'n-ik tb-u</td>
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Paradigm
triliteral weak hollow e.g. tar t-j-r 'fly'

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Paradigm
triliteral strong imperfective kiteb k t b and tar t j r

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Paradigm: CV structure
Triliteral strong imperfective kiteb and tar

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Different pattern, therefore 2 different classes
Inflectional classes

kiteb = class 1 (Cl 1)

tar = class 2 (Cl 2)

i.e. classes determined on the basis of stem form
Comparing the paradigms of 2 triliteral strong verbs:

Cl 1a and Cl 1b

e.g. kiteb  k-t-b 'write'

e.g. seraq  s-r-q 'steal'
Paradigm
Triliteral strong e.g. kiteb k-t-b 'write'

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<td>`ki teb</td>
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Paradigm
Triliteral strong e.g. seraq 'steal'

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## Paradigm
### Triliteral strong imperfective

kiteb and seraq

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Paradigm
Triliteral strong imperfective kiteb and seraq

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Different pattern in plural, therefore 2 different (though related) classes
Inflectional classes

kiteb = class 1a (Cl 1a)

seraq = class 1b (Cl 1b)
Strategy

1. Identify classes in terms of stem variation

2. Account for patterns with as few rules/principles/constraints as possible
Verb classes

see handout
E.g.

Accounting for stem variation 1:

Cl 1a  and Cl 1b

Sonority and syllabification
Cl 1a: $C_1 C_2 C_3$ vs. Cl 1b $C_1 C_2 C_3$

Cl 1b $C_2 = l, m, n, r [+\text{sonorant}]$
(traditionally/orthographically also silent gh)
\haleb somot kines seraq (lagh\ab)
nah\ilbu nisomtu nikinsu nisir\qu (nilag\ghbu)

Cl 1a $C_2 = [-\text{sonorant}]$
kiteb hataf ni\jel libes
niktbu na\htfu nin\j\lu nilbsu
Informal statement:

Sonorant + Obstruent cluster breaker:

a vowel position is inserted before the sonorant to break up sonorant + consonant clusters

E.g. nisrqu 'we steal'

r cannot be in onset (*rqu) (or in coda *nisr) for reasons of sonority, therefore:

nisrqu → ni sVr qu
Cluster breaker vowel melody:

1. a - a → a naḥraq naḥarqu
2. o - o → o noḥlom noḥolmu
3. i - o → o nitlob nitolbu
4. i - a → i niflaḥ nifilḥu
5. i - e → i naqleb naqilbu
6. e - e → i nehles nehilsu

i.e. always the second vowel, with /ε/ → [ε] /___

[+stress]

NB: a = , o = , i = , e = ɛ
Accounting for stem variation in triliteral strong verb:

syllabification
Paradigm
Triliteral strong e.g. kiteb  

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<td>3m</td>
<td>`ki teb</td>
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Stem form depends on suffix:

1. vocalic suffix: kitb-et, kitb-u
   kitb  CVCC

2. consonantal suffix: ktib-t, ktib-na, ktib-tu
   ktib  CCVC

3. no suffix: kiteb
   kiteb  CVCVC

→ Suggests that stem variation in such cases is a result of syllabification
Assumption

triliteral strong and quadriliteral verbs:

vowels have lost their morpheme status,

they have taken on a purely phonological/prosodic function:

i.e. providing material for syllabifying radicals
Theoretical assumptions 1

Lexical entry of triliteral strong and quadriliteral verbs factorised into root and vowel melody ($\mu =$ morpheme)

(a) *kiser*

\[
[k s r]_\mu [i e] [+V, -N] \text{ ‘break’}
\]

(b) *harbex*

\[
[s r p]_\mu [e] [+V, -N] \text{ ‘mess up’}
\]
Theoretical assumptions 2

Lexical entry of other verbs (weak, non-Semitic) non-factorised:

*ipparkja* ‘park’
Syllable formation 1

The Syllable Builder

1. operates from right to left
2. checks for acceptable (optimal) syllables/words
3. inserts vowel position in first available position to create acceptable (optimal) syllable
4. domain of application: radicals
Syllable formation 2
The Cluster Breaker

breaks up clusters of
Sonorant + Obstruent by inserting a vowel position before the S
Syllable/word templates and filters

i) optimal syllables
[CVCC]_σ
[CCVCC]_σ
= [(C)CVC(C)]_σ

ii) non-syllables
*[CVVCC]_σ
*[CCVC]_w

iii) non-words
*[VCC]_w

Stress:
penultimate unless final is 'heavy' (VVC, VCC, ...
Derivation of perfective of form 1 verbs

Entries:

1. \([k,s,r] \quad [i,e]\) \enspace \text{kiser (triliteral strong)}

2. \([r,k,b] \quad [i,e]\) \enspace \text{rikeb (triliteral strong)}

3. \([t,f,V] \quad [e,a]\) \enspace \text{tefa (triliteral weak)}

4a. \([t] \quad [+1, -PL]\) \enspace \text{(consonantal base)}

4b. \([ejt] \quad [+1, -PL]\) \enspace \text{(vocalic base)}
r k b
C C C

C C C

t f
C C V

C C V

e j t (floating vowel)
C C

C C
PERFECTIVE 1SG: -t
ksirt 'I broke'

[k,s,r], [i,e]

1. Affix: ksrt
2. Syllable: ksVrt
3. Stress: `ksVrt
4. Vocalism: `ksirt (e → i/___ ) [+stress]
PERFECTIVE 3MSG: ∅
kiser 'he broke'

[k,s,r], [i,e]

1. Affix: ksr
2. Syllable1: ksVr
3. Syllable2: kVsVr
4. Stress: `kV sVr
5. Vocalism: `kiser
Set of radical and stem patterns
(N.B. the list is not exhaustive)

C C C C P1 (form 1)
C C_i C_i C P2 (form 2)
C C V P3 (triliteral weak)
C C a P4
C V V C P5
C V C_i C_i P6
C V V C C P7
C t C C P8
st C C C P9
t C C_i C_i C P10
Entries:

a. [k s r] [i e]; +V, -N, P1, P2, P10
   (kiser ‘break’, kisser ‘break intensively’, tkisser ‘is broken’)

b. [t f V] [e a]; +V, -N, P3
   (tefa ‘extinguish’)

c. [f r k] [a]; +V, -N, P2, P10
   (farrak ‘shatter’, tfarrak ‘was shattered’)

d. [ipparjka]; +V, -N
   (ipparkja ‘park’)
Conclusion

1. Still at level of intuition

2. Details, especially vocalism, not yet worked out

3. Needs to be formalised in some current model, e.g. optimality theory

4. Needs to include more complex verb forms with object clitics and the negative suffix/circumfix
Some examples of complex word forms

n-israq 'I steal'
n-isirq-ek 'I cheat/burgle you'
n-israq-lek 'I steal from you'
n-isirq-u-lek 'I steal it(3msg) from you'
n-israq-hie-lek 'I still it(3fsg) from you'
ma n-israq-hi-lek-x 'I do not steal it(3fsg) from you'
Grazzi ħafna

Thank you very much