

## Modern Hebrew

Due in class on Wed. 1/21/09

The following data are a subset of a Modern Hebrew problem from Kenstowicz and Kisseberth's (1979) text *Generative Phonology: Description and Theory*. Invent and present an Optimality theoretic analysis. Be sure your analysis can rule out the candidates given at the end of the problem.

Please use "OTSoft 2.3" software to verify your analysis. A working copy is on PC #1 and PC #3 in the computer room, or download to your Windows computer from <http://www.linguistics.ucla.edu/people/hayes/otsoft/>. You can get an Excel file with the candidates from <http://www.linguistics.ucla.edu/people/hayes/201/>.

You may find it takes a little while to run the ranking diagnostic — probably best to leave it off until you've got a working analysis up and running.

### Notes on Modern Hebrew

- The data are all verbs in the "itpa'el" *binyan*. A *binyan* is a characteristic pattern of C's and V's and of vowel qualities, serving as a central aspect of Semitic verbal morphology. In traditional terms, you will find processes of vowel lowering, voicing assimilation, syncope, and metathesis.
- [c] is an alveolar affricate, IPA [tʃ]; and [ħ] is a voiceless pharyngeal fricative.

### Some analytic suggestions

- The Faithfulness constraint that is violated when the surface form has segments in a different order from the underlying form is commonly called LINEARITY.
- Faithfulness constraints often come in two flavors: the generic one, and one limited to **stem** segments.
- You may assume that Modern Hebrew has no surface geminates (= adjacent identical consonants).

## Modern Hebrew Data

1 sg.	3 sg. masc.	3 sg. fem.	Gloss
itparnasti	itparnes	itparnesu	'earn'
itparsanti	itparsem	itparsemu	'become famous'
idbalbalti	idbalbel	idbalbelu	'be confused'
idgalgalti	idgalgel	idgalgelu	'revolve'
ithamakti	ithamek	ithamku	'turn away'
itlabafti	itlabeʃ	itlapʃu	'get dressed'
idbadarti	idbader	idbadru	'make fun'
idgarafti	idgareʃ	idgarʃu	'divorce'
itpalalti	itpalel	itpalelu	'pray'
itxamanti	itxamem	itxamemu	'warm'
itʔofaʃti	itʔofeʃ	itʔofeʃu	'recover consciousness'
istaparti	istaper	istapru	'get a haircut'
istarakti	istarek	istarku	'comb hair'
iʃtaparti	iʃtaper	iʃtapru	'improve'
ictalanti	ictalem	ictalmu	'have one's photo taken'
izdakanti	izdaken	izdaknu	'age'
izdarasti	izdarez	izdarzu	'hurry'
idardarti	idarder	idarderu	'decline'

### List of Forms to Derive and Rival Candidates

it-parnes-ti	it.par.nas.ti	it-zarez	iz.da.rez
	it.par.nes.ti		it.za.rez
	it.parns.ti		iz.ta.rez
	it.par.nsti		is.ta.rez
	it.par.ne.se.ti		id.za.rez
	it.par.ne.sit	it-darder	i.dar.der
it-parnes	it.par.nes		it.dar.der
	it.parns		id.dar.der
it-parnes-u	it.par.ne.su		i.tar.der
	it.par.nus		it.tar.der
	it.par.su		
	it.par.nes		
	it.parn.su		
	it.par.nsu		
it-balbel	id.bal.bel		
	it.bal.bel		
	i.te.balbel		
	ti.bal.bel		
it-hamek-u	it.ham.ku		
	it.ha.me.ku		
it-palel-u	it.pa.le.lu		
	it.pal.lu		
it-labej-u	it.lap.fu		
	it.la.be.fu		
	it.lab.3u		
	it.lab.fu		
it-saper	is.ta.per		
	it.sa.per		
	i.sa.per		
	i.te.sa.per		
it-hamk	it.ha.mek		
	it.hamk		
	it.ham.ke		
	it.ham		

