

Analysis paper | Epenthesis in Lebanese Arabic — final version

For this assignment, your goal is to demonstrate your understanding of:

- how to apply concepts from our course to identify the phonological factors that predict the occurrence of epenthesis in a data set
- how to state generalizations and support claims with well-organized data
- how to propose and defend an OT analysis of a phonological phenomenon

These data are from **Lebanese Arabic**, a Levantine variety of Arabic spoken in Lebanon.

- Here is a chart of the consonants in this language variety:

stops		t, t ^ʕ		k		ʔ
	b	d, d ^ʕ				
fricatives	f	s, s ^ʕ	ʃ	x	ħ	h
		z, z ^ʕ	ʒ	ɣ	ʕ	
nasals	m	n				
liquids		l, r				<i>note: [r] is described in source as “tap or trill”</i>
glides	w			j		

The notation [C^ʕ] indicates an emphatic C, that is, a C as symbolized but with an additional constriction at the pharynx which we can formalize with a new place feature [PHARYNGEAL]. (The fricatives [ħ ʕ] are also [PHAR], but they have no other place.)

- The data set shows information about URs and surface forms for Lebanese Arabic nouns. Some, but not all, CVCC nouns surface with an epenthetic vowel, which varies phonetically depending on context but is transcribed here as [i] for convenience.

Your task is to propose an OT grammar that makes the right predictions about where epenthesis does and does not occur in this data set. Your assignment will take the form of a phonological analysis **paper**, with the following sections:

1. **Descriptive generalizations:** Here, you explain to your reader in words what factors predict the occurrence or not of epenthesis in the data set. Each generalization that you make should be supported by organized data to support your claim.
2. **OT analysis:** In this section, you propose an OT analysis that makes predictions to match your descriptive generalizations. For this, you may use any constraints we have used in the course, but you may also wish to propose and formally define one or more new constraints. You do not have to include constraints that are not relevant for your discussion, but you should think carefully about informative losers and use them to help you identify constraints that are relevant.

Some reminders:

- Any constraint you use should be introduced and given a formal definition. Constraints from class may be given definitions from course materials. New constraints should be defined in terms of our phonological model. Be explicit!

- Any ranking you claim should be supported with explicit evidence from an appropriately notated constraint tableau.
- Any tableau you present should be accompanied by a listing of all the constraint rankings proven in the tableau.
- Constraints in tableaus should be ordered according to your final analysis.
- Keep your analysis streamlined and clear: avoid including losers, or entire tableaus, that are not informative.

3. Discussion: In this section, you will briefly summarize your results or main claims. (How do you summarize the set of rankings you are proposing in an analysis?) This is also an opportunity to raise any problems you have found for our model or any further questions you see that could be pursued. In your discussion, be sure to use course concepts insightfully whenever relevant.

How to structure your paper: In addition to organizing your paper into sections 1–3 as explained above, here are further expectations for a phonological analysis paper:

- Imagine your reader is a phonology student from another university who may not know the exact details of our model and who hasn't looked at this data set. (Don't be writing with someone who "knows the answer" as your audience.)
- Present your analysis clearly. Put your ideas in an order that explains and justifies your proposal and makes it easy for the audience to follow. Avoid writing a "history of your thought process"; instead, straightforwardly explain the analysis you have decided on. Edit your writing for clarity!
- Please type the paper, including OT tableaus. If you include diagrams showing phonological structure, these may be handwritten if needed. Proofread your paper to check for typos and technical errors.
- No generative AI (such as ChatGPT, Copilot, Gemini, etc.) may be used as you work on this data set or write up the analysis.

Summary of grading criteria

- Descriptive generalizations are stated (in words)
- Descriptive generalizations are supported with data
- Data is insightfully organized, helpful to reader
- OT analysis is presented
- Relevant previously discussed constraints are included
- New constraints are introduced (if needed)
- Constraints are given explicit formal definitions using the tools of our model
- Relevant constraint rankings are found
- Ranking claims are explicitly supported with valid evidence, notated appropriately
- Only valid rankings are claimed
- Each tableau is accompanied by a statement of the rankings proven there
- Constraints in tableaus are ordered according to the results of the overall OT analysis
- OT formalism is correctly applied (no errors in tableaus)
- Losers, and tableaus, are informative
- Summary of rankings is presented accurately and with appropriate notation
- If discussion of problems included, shows insightful application of course concepts
- Assignment is structured according to instructions (sections 1, 2, 3)
- Efficient, insightful order of ideas (avoid "history of thought process")
- Logic of discussion is clear and easy to follow
- Assignment is typed (handwritten structure diagrams are acceptable)
- Assignment is easy to read; few or no errors

	UR	SR	gloss	UR	SR	gloss
(1)	/haw/	same	'around'	/xaj/	same	'horses'
	/ʕajn/	same	'eye'	/lawm/	same	'blame'
	/xawf/	same	'fear'	/mawz/	same	'bananas'
	/zajf/	same	'army'	/bajt/	same	'home'
	/ʕajb/	same	'shame'	/ʔawd/	same	'leading'
	/lajk/	same	'look'			
(2)	/ħilm/	same	'dream'			
(3)	/ħiml/	[ħimil]	'load'	/ʔifl/	[ʔifil]	'lock'
	/nasl/	[nasil]	'progeny'	/ʔakl/	[ʔakil]	'food'
	/ʃikl/	[ʃikil]	'shape'	/ʔism/	[ʔisim]	'name'
	/ʕatm/	[ʕatim]	'darkness'	/ħikm/	[ħikim]	'ruling'
	/ʔamn/	[ʔamin]	'peace'	/rikn/	[rikin]	'nook'
	/dafn/	[dafin]	'burial'	/husʕn/	[husʕin]	'fortress'
	/ʔibn/	[ʔibin]	'son'			
	/kan-l-na/	[kanilna]	'he was for us'			
(4)	/nasf/	[nasif]	'detonation'	/razf/	[razif]	'trembling'
	/natf/	[natif]	'plucking'	/ʕakf/	[ʕakif]	'leaning to'
	/balf/	same	'bluffing'			
(5)	/fils/	same	'small coin'	/talz/	same	'snow'
	/nakz/	same	'poking'	/ʔatʕf/	same	'cutting off'
	/ramz/	same	'symbol'	/ʔins/	same	'humans'
	/yinʒ/	same	'wantonness'	/ʕafs/	same	'furniture'
	/nafs/	same	'self'	/...ʔids/	same	'Jerusalem'
	/ħabs/	same	'prison'			
(6)	/nasʒ/	[nasiz]	'weaving'	/ʔas-ʃ/	[ʔasiʃ]	'he didn't measure'
	/ħazʒ/	[ħaziz]	'booking'			
(7)	/kalb/	same	'dog'	/ʒild/	same	'weather'
	/ħamd/	same	'praise'	/bint/	same	'girl'
	/ħank/	same	'jaw'	/kizb/	same	'lying'
	/wizk/	same	'win'	/ʔustʕ/	same	'fee'
	/muftʕ/	same	'comb'	/mazd/	same	'glory'
	/xasʕb/	same	'fertile'	/lift/	same	'turnip'
	/safk/	same	'bloodletting'	/sakt/	same	'silence'
	/rakd/	same	'running'	/ʕabd/	same	'slave'
	/labtʕ/	same	'kicking'			
(8)	/fatk/	[fatik]	'eradicating'	/nadb/	[nadib]	'wailing'
	/rikb/	[rikib]	'riding'	/ħabk/	[ħabik]	'weaving'