Illustrations of Ukrainian Phonetics
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1. Introduction
This paper explores the phonetics of Ukrainian, the language natively spoken in Ukraine, specifically the Southwest dialect commonly spoken in the region of Lviv. Ukrainian belongs to the Indo-European family and Slavic subfamily and has three main dialects: East, Northwest, Southwest, distributed based on geography [1]. Ukrainian is spoken by roughly 40 million native speakers today [2]. The writing system of Ukrainian is the Cyrillic Alphabet, which is largely phonetic.

My consultant for this project is Maksym Alex Prokopovych. Maksym is 22 years old and was born in Los Angeles. He spoke Ukrainian as his first language at home, taught at first by his mother, supplemented with Saturday school. He continues to speak predominantly Ukrainian at home and can speak it fluently. Maksym learned English secondly starting from preschool and knows how to read and write Ukrainian proficiently. Every few years, he travels to Ukraine and can speak fluently with native speakers there. His dialect comes from his mother, who is from Lviv from west Ukraine.

The reference source for this project is Ukrainian, an "Illustrations of the IPA" article from the Journal of the International Phonetic Association by Cambridge University Press [3]. The article is a research article on accumulated sources on Ukrainian as a language. It also contains the Ukrainian phonemes and the allophones that may result from them in different contexts. In addition, diacritics and recording information is also included. Example words and paragraphs both in Cyrillic and IPA are also within its contents, as well as a Cyrillic alphabet. However, my consultant found the words provided outdated, formal, and too simple to illustrate the context-dependent allophones, so the word list provided from Maksym himself with edits from myself. For source pronunciations, I am using Wiktionary transcriptions [7].

2. Ukrainian Consonants
The consonants listed by Pompino-Marschall are listed in the chart below. Palatalized sounds in parentheses are allophones of the non-palatalized phonemes, also known as "half-palatalized". As in the IPA chart, voiceless sounds are in the left part of each cell and voiced sounds are in the right part. Some phonemes here in Pompino-Marschall's consonant chart exist as allophones in my findings. I've marked those additional allophones with brackets.

(1) Consonant IPA chart

		Bilabial	Labio-dental	Dental/Alveolar	Alveolo-palatal/Post-alveolar	Palatal	Velar	Glottal
Plosive	plain	p　　b		t　　d			k　　　g	
	palatalized	(pʲ)　(bʲ)		tʲ　　dʲ			(kʲ)　　(gʲ)	
Nasal	plain	m		n				
	palatalized	(mʲ)		nʲ				
Fricative	plain		f	s　　z	ʃ　　　ʒ		x	ɦ
	palatalized		(fʲ)	sʲ　　[zʲ]	(ʃʲ)　　(ʒʲ)		(xʲ)	(ɦʲ)
Affricate	plain			t͡s　　[d͡z]	t͡ʃ　　d͡ʒ			
	palatalized			t͡sʲ　　d͡zʲ	(t͡ʃʲ)　(d͡ʒʲ)			
Trill	plain			r				

	palatalized			[rʲ]			
Approxi-mant	plain		ʋ				
	palatalized		(ʋʲ)			j	
Lateral	plain			l			
Approxi-mant	palatalized			lʲ			

     The remainder of this section illustrates the consonant phonemes and their allophones. For each phoneme and word example, there will be several transcriptions each. The first is the broad transcription, which shows the underlying phonemes of the word. The second is a narrow transcription of how Maksym pronounces each word in the recording. There may be more than one of these if the pronunciation of the word was done in multiple ways. Finally, I will give narrow transcriptions of the words from Wiktionary [7].

     The spelling of the word in Cyrillic will also be provided along with the glossary of meanings in English. The numerical order follows that of the recording. Respective allophones will be discussed in sections following each manner of articulation.

2.1 Ukrainian Consonant Palatalization

Palatalization is a contrastive feature of Ukrainian consonants and is reflected in the morphology of the Cyrillic alphabet, as palatalizing consonants often produces separate phonemes. For example, the set of Cyrillic representing unpalatalized phonemes i e a y (phonemes are /i ɛ u a/) is in complementarily distribution with the set of palatalized phonemes ï є я ю (phonemes are /ji jɛ ju ja/) [6]. Pompino-Marschall describes three categories of palatalization: soft, semi-soft, and hard palatalized sounds. While phonetically semi-soft and soft sounds are all considered to be the original phonemes with a palatalizing diacritic, there exists a perceived distribution between them, in which soft sounds are considered completely palatalized, and hard sounds is considered unpalatalized, and semi-soft sounds are perceived as somewhere in between [3]. Accordingly, the IPA chart adds distinction between palatalized phonemes and non-palatalized phonemes. Ukrainian also has the general quality of being more enunciated and phonetic than languages such as English. The alphabet is highly phonetic and match broad transcriptions closely.

2.2 Plosives

The voiced plosives are fully voiced, as Pompino-Marschall notes, and in my recordings, oftentimes mark the places of most stress in words. Voiceless plosives are unaspirated throughout. It is possible the voiced plosives' complete voicing helps it contrast better with the voiceless plosives to form phonemic complementary distribution.

(2) Plosive phonemes

Num-ber	Pho-neme	Broad	Narrow	Source	Ukrainian Cyrillic	English gloss
64	/p/	/prɔstir/	[ˈprɔstʰir]	[ˈprɔsʲtʲir]	Простір	landscape
21	/b/	/bɛrɛzɛnʲ/	[ˈbɛrɛzɛɳ]	[bereˈzanʲ]	Березень	March (the month)
70	/t/	/tinʲ/	[cʰinʲ]	[tʲinʲ]	Тінь	shadow
68	/d/	/dɪwɪsʲ/	[dɪvɪsː]	[dʲɪˈvʲisʲ]	Дивись	look (command second person)
71	/tʲ/	/tjulɛnʲ/	[duˈɫɛŋʲ]	[tʲulɛnʲ]	Тюлень	seal
34	/dʲ/	/dim/	[ˈdjim]	[dʲim]	Дім	home/house
48	/k/	/kɔlɔ/	[ˈkɔɫɔ]	[ˈkɔɫɔ]	Коло	circle
32	/g/	/galij/	[ˈgaɪ̯]	[galiʲ]	Ґалій	Gallium

2.3 Allophones of plosives

Several noted allophonic phenomena arise in production of varying prominence. There are roughly 3 following categories: palatalizing allophones as predicted by Pompino-Marschall, consistent apparent allophones as seen in Maksym's recordings, and mentions of possible instances I found but lacking strong enough evidence.

(3) Allophones of stops

| Number	Allophone	Broad	Narrow	Source	Ukrainian Cyrillic	English gloss
7	/tʲ/ → [tʰ] / V_#	/wɛsɪtʲ/	[vɛˈsɪtʰː]	[ˈvʲesʲɪtʲ]	весить	hangs (adj, neuter)
18	/b/ → [b̥] / V_#	/jɑstrub/	[ˈjastru̥b̥]	[ˈjastrʊb]	Яструб	hawk
12	/d/ → [dʰ] / V_#	/jɔd/	[ˈjɔːdʰ]	[jɔd]	йод	Iodine
11	/k/ → [k'] / V_#	/jiʒak/	[ˈjiːʒak']	[jiˈʒak]	їжак	porcupine
11	/k/ → [kʰ] / V_#	/jiʒak/	[ˈjiːʒak']	[jiˈʒak]	їжак	porcupine
20	/b/ → [ɓ] / #_ or V_/u/	/jablukɔ/	[ˈjaːɓuɫkɔ̥]	[ˈjabɫʊkɔ]	Яблуко	apple
53	/p/ → [b] / #_/u/	/pustɛljɑ/	[b̥ustɛljɑ]	[pʊˈstɛlʲɐ]	Пустеля	desert

/b/ appears slightly implosive when appearing before the /u/ vowel. For this I found two possible instances. I hypothesize this is as the place of articulation is so drastic between bilabial and high back vowel, that it creates a slight implosive airflow. This is difficult to show on the spectrogram because the distinctive triangle for implosive stops is very small.

Aspiration seen in word final voiceless stops in the below spectrograms. Though Ukrainian voiceless stops are unaspirated according to Pompino-Marschall, Maksym's recordings tended to aspirate /p t k/ when they occurred word final[3]. Ukrainian also doesn't devoice word final, however, Maksym tends to devoice his voiced stops when they are word final. This may be a remnant of English as Maksym is fluently bilingual in both languages, and word final aspiration and devoicing is prominent in English. The clear voiceless aspiration broad band is visible in figures *(4)* and *(5)*.
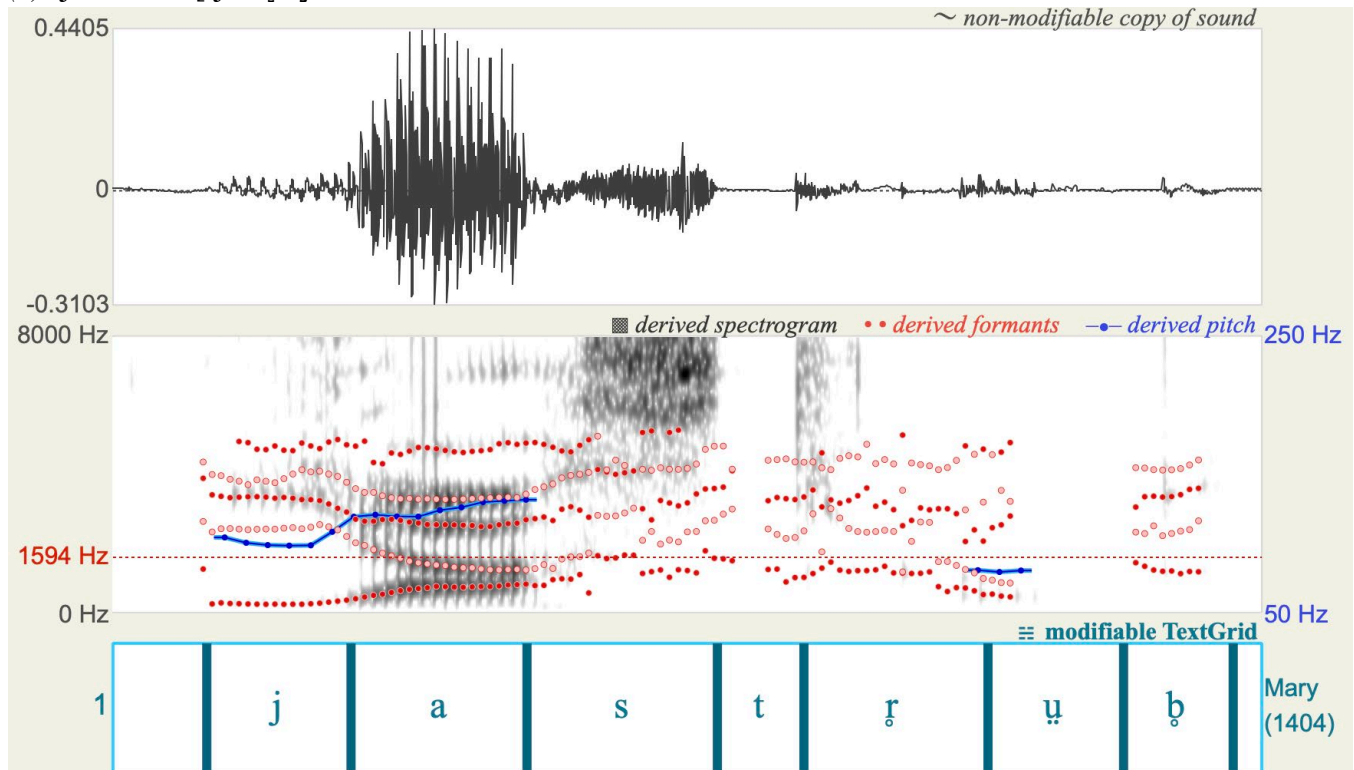
(4) /wɛsɪtʲ/ = [vɛˈsɪtʰː]
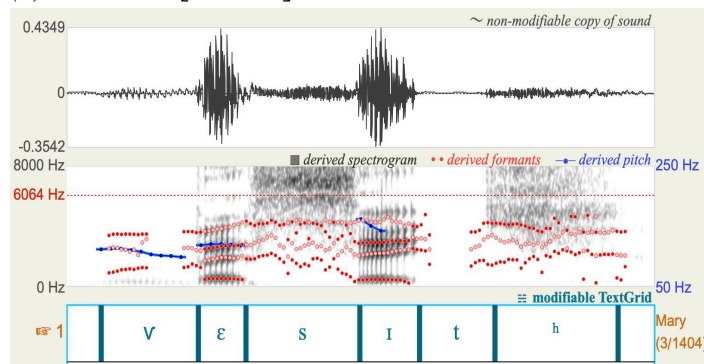
(5) /urɔk/ = [urɔkʰ]
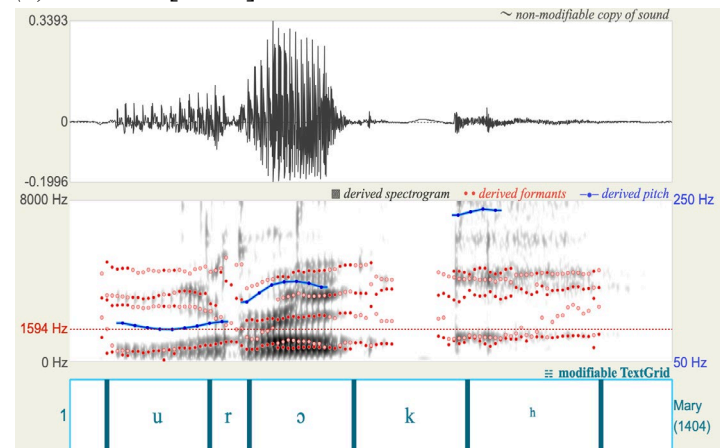
In figure *(7),* the spectrogram shows the nonexistence of a voicing bar in the /b/ segment of the spectrogram. Aside from the release of the stop, this segment is barely visible because of word-final devoicing.

(7) /jɑstrub/ = [ˈjastru̯b]

2.4 Nasals

(8) Nasal phonemes

Number	Pho-neme	Broad	Narrow	Source	Ukrainian Cyrillic	English gloss
42	/m/	/mɔʒɛ/	[ˈm̃ɔʒa̰]	[ˈmɔʒe]	Може	maybe/can
57	/n/	/nɛstɪ/	[nɛsˈtɪ]	[neˈstɪ]	Нести	to carry
58	/nʲ/	/nʲɔɦɔ/	[ˈɲːɔɦɔʰ]	[ˈnʲɔɦɔ]	Нього	third person datative

2.5 Allophones of nasals
(9) Allophones of nasals

Num-ber	Allophone	Broad	Narrow	Source	Ukrain-ian Cy-rillic	English gloss
58	/nʲ/ → [ɲ] / #_V	/nʲɔɦɔ/	[ˈɲːɔɦɔʰ]	[ˈnʲɔɦɔ]	Нього	third person data-tive masc pronoun
28	/nʲ/ → [ŋ] / /ɛ/ or /ɪ/_#	/wɔɦɔnʲ/	[ʊɔːˈɦɔɪŋ]	[wɔˈɦɔnʲ]	Вогонь	fire

2.6 Fricatives and Affricates

(Fig) Fricative and Affricate phonemes

Number	Phoneme	Broad	Narrow	Source	Ukrainian Cyrillic	English gloss
77	/f/	/fara/	[faːra]	[ˈfarə]	Фара	headlight

4

66	/s/	/sɔn/	[sɔ̃ŋ]	[sɔn]	Сон	dream
69	/sʲ/	/ɔsʲ/	[ʔɔsː]	[ɔsʲ]	Ось	here
43	/z/	/zapɔriʒɑ/	[ˈzaporiˌʒːa]	[zɐpɔˈrʲiʒʲːɐ]	Запоріжжя	Zaporizhzhya city
80	/x/	/xɔlɔdɛt͡s/	[ˌxɔɫɔˈdɛt͡sː]	[ˈxɔlɔdɛt͡s]	Холодець	Aspic
52	/ɦ/	/ɦlɪna/	[ɦˈlɛnã]	[ˈɦlɪnɐ]	Глина	clay
83	t͡s	/t͡sɪbulja/	[t͡sɪˈbuɫja]	[t͡sɛˈbulʲɐ]	Цибуля	onion
79	t͡sʲ	/xlɔpɛt͡sʲ/	[ˌxlɔˈpɛt͡sː]	[ˈxlɔpɛt͡sʲ]	Хлопець	boy
46	d͡zʲ	/dzʲɔbatɪ/	[ˈd͡zjo͡ʊbatɪ]	[dzʲɔbatɪ]	Дзьобати	to peck
85	t͡ʃ	/t͡ʃɔmu/	[ˈt͡ʃɔmuː]	[t͡ʃoˈmu]	Чому	why
10	d͡ʒ	/pidʒak/	[piːˈd͡ʒːak']	[pʲiˈd͡ʒak]	піджак	suit jacket

In figure *(10)* I've provided a spectrogram to illustrate the compound consonant in Ukrainian /ʃt͡ʃ/ which appears as a fricative followed by a combined stop and fricative affricate. [4] mentions the Cyrillic alphabet has this phoneme.

(10) /ʃt͡ʃastjɑ/ = [ˈʃt͡ʃastjḁ]
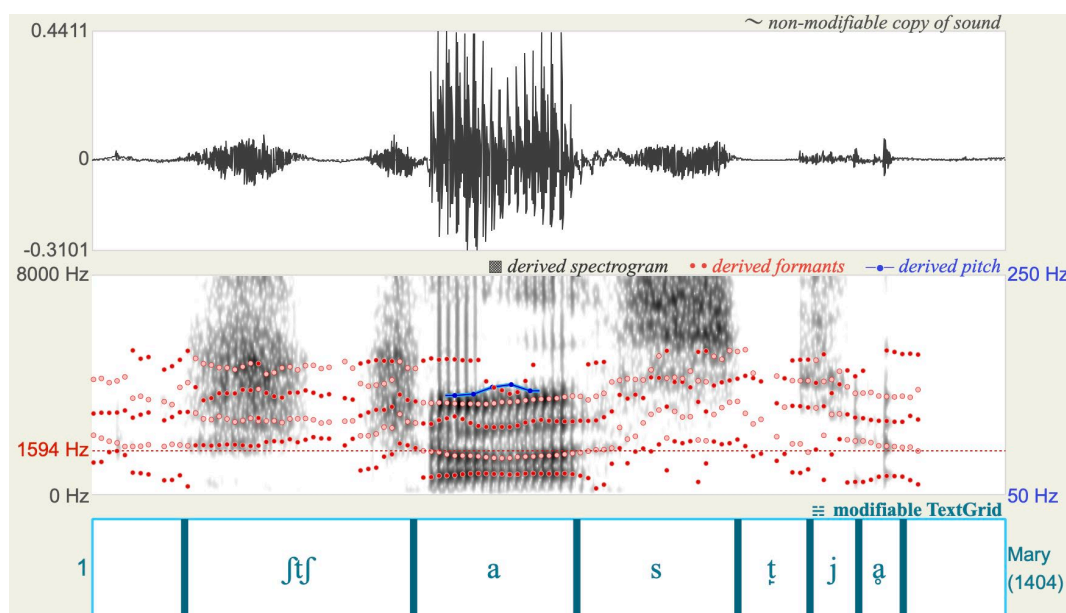
2.7 Allophones of fricatives and affricates
(11) Allophones of fricatives and affricates

Number	Allophone	Broad	Narrow	Source	Ukrainian Cyrillic	English gloss
29	/ɦ/ → [ç] / _i	/ɦistʲ/	[ˈçistʰ]	[ɦʲisʲtʲ]	Гість	guest
81	/x/ → [ç] / _i	/ximijɑ/	[ˈçimia̯]	[ˈxʲimʲija]	Хімія	chemical
9	/ʃ/ → [ɕ] / _[i]	/inʃi/	[ˈiɲɕi̠]	[ˈinʲʃi]	інші	other

/x/ and /ɦ/ become [ç] before the high front i vowel

/ʒ/ appears as [ʐ] in one instance, becoming retroflex. This is not adequately supported but I thought this was interesting as Pompino-Marschall noted that some Western Ukrainian dialects (of which, L'viv is one

such western state) manifest post alveolar fricatives and affricates as retroflex alveolar allophones, as an influence of bordering Polish assimilation.

2.8 Trills
(12) Trill phonemes

Number	Phoneme	Broad	Narrow	Source	Ukrainian Cyrillic	English gloss
62	/r/	/rɔstɪ/	[ˈrɔstɪ]	[rɔˈstɪ]	Рости	to grow
63	/rʲ/	/pirjɑ/	[ˈpiːrj̟ɑ]	[ˈpirjɑ]	Пір'я	feathers

2.9 Allophones of trills
(13) Allophones of trills

Number	Allophone	Broad	Narrow	Source	Ukrainian Cyrillic	English gloss
65	/r/ → [ɾ] / V_V	/starɪj/	[ˈstaɾɪ̆ː]	[stɐˈrɪɪ̯]	Старий	old (adj, masc)
63	/rʲ/ → [ri] / V_V	/pirjɑ/	[ˈpiːrj̟ɑ]	[ˈpirjɑ]	Пір'я	feathers
22	/r/ → [ɻ] / V_#	/stɔwbur/	[ˈstoʊːvbuɻ]	[ˈstɔu̯bʊr]	Стовбур	tree trunk/stump
22	/r/ → [ɹ] / /u/_#	/stɔwbur/	[ˈstoʊːʋbuɹ̝]	[ˈstɔu̯bʊr]	Стовбур	tree trunk/stump

Rolled r's in Ukrainian are the perceived underlying phoneme in all rhotic utterances. However, the allophones of /r/ vary greatly. Most commonly, it surfaces as a alveolar tap/flap especially in unstressed syllables, as the trill shortens to a single unit *(14)*. This is shown in the gap between the vowels in the spectrogram. Word finally, /r/ is sometimes realised as [ɹ] *(15)*. You can see the formants pinch together from the [u] vowel to the [ɹ].
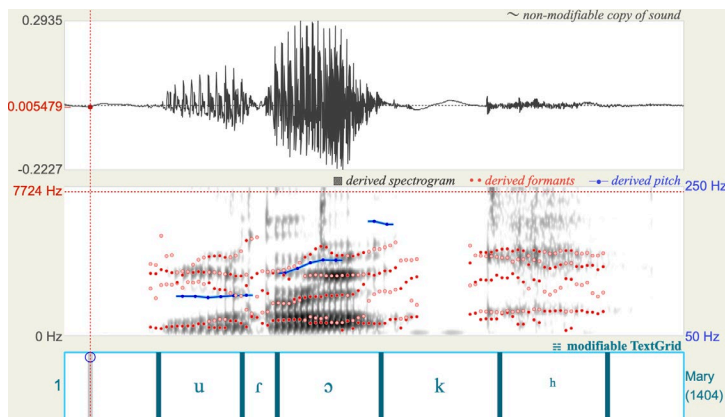
(14) /urɔk/ = [urɔkʰ]   *(15) /stɔwbur/ = [ˈstoʊːʋbuɹ]*

2.10 Approximants and lateral approximants

(14) Approximant phonemes

Number	Phoneme	Broad	Narrow	Source	Ukrainian Cyrillic	English gloss
35	/ʋ/	/wɔda/	[ʋɔˈdːa]	[wɔˈda]	Вода	water
12	/j/	/jɔd/	[ˈjɔːdʰ]	[jɔd]	йод	Iodine

| 54 | /l/ | /mlɪn/ | ˈmɫlɪn] | [mlin] | Млин | mill |
| 51 | /lʲ/ | /lʲwiw/ | [ˈɫvifː], [ˈl̥ʲɛ̃vifː] | [lʲʊ̯ʲiu̯] | Львів | Lviv |

2.11 Allophones of approximants and lateral approximants

(15) Allophones of approximants and lateral approximants

Number	Allophone	Broad	Narrow	Source	Ukrainian Cyrillic	English gloss
36	/ʋ/ → [v] / #_V	/wɔdka/	[ˈvɔd:ka]	[ˈwɔdkɐ]	Водка	vodka
7	/ʋ/ → [v] / #_[ɛ]	/wɛsɪtʲ/	[vɛˈsɪtʰː]	[ˈvʲesʲɪtʲ]	весить	hangs (adj, neuter)
39	/l/ → [ɫ] / everywhere	/dʒɛrɛlɔ/	[ˌdʒɛrɛˈɫɔː]	[dʒereˈɫɔ]	Джерело	source/water spring
40	/lʲ/ → [lʰ] / V_#	/ʒurawɛlʲ/	[ˌʒuraˈʋɛɫʰː]	[ʒʊrɐˈʋɛlʲ]	Журавель	crane (the bird)
44	/j/ → [ɛ] / V_#	/zɛlɛnɪj/	[ˈzɛɫɛnɛ̠ː]	[zeˈɫenei̯]	Зелений	green
51	/ʋ/ → [f] / [i]_#	/lʲwiw/	[ˈl̥ɛ̃vifː]	[lʲʊ̯ʲiu̯]	Львів	Lviv

According to Pompino-Marschall, since non-palatalization has a velarizing effect, /l/ tends to be realized as the velarized /ɫ/ regardless of word-internal positioning. This is due to the raised dorsum of the tongue, as well as the general enunciated quality of Ukrainian.

Allophones of /ʋ/ range from narrow fricative constriction to approximant. Sometimes, due to word final devoicing coupled to more closure, a resulting [f] allophone emerges as in *(16)*. We can see there is no voicing bar in that segment, as well as broad band noise indicative of fricative accoustic manner. In contrast, in *(17)* we can see the voicing bar and frication but less than in (16). I classified this still as a fricative as there was still frication. However, the difference in these two allophones shows how this phoneme occupies a range of allophones differing on the axis of manner of articulation.

(16) /lʲwiw/ = [ˈl̥ɛ̃vifː]

(17) /wɔdka/ = [ˈvɔd:ka]

3. Ukrainian Vowels
The vowel phonemes are shown in *(18)* as according to Pompino-Marschall. The mid central vowel occurs voiced and unvoiced only in unstressed syllables.

(18) Vowel phonemes

	front	central	back
high	i		u
upper-mid	ɪ		
mid	ɛ	ə	ɔ

lower-mid

low a

glides (ɪ̯)

voiceless vowels (ə̥)

3.1 Vowel phonemes
(19) Vowel phonemes

Number on recording	Phoneme	Broad	Narrow	Source	Ukrain-ian Cy-rillic	English gloss
9	/i/	/inʃi/	[ˈiŋɕi]	[ˈinʲʃʲi]	інші	other
50	/ɪ/	/lɪst/	[ˈɫɪstʰ]	[ɫɪst]	Лист	letter
7	/ɛ/	/wɛsɪtʲ/	[vɛˈsɪtʰ:]	[ˈvʲesʲɪtʲ]	весить	hangs (adj, neuter)
1	/a/	/apɛlʲsɪn/	[ˈapɛɪˌsɪm]	[ɐpelʲˈsɪn]	апельсин	orange (the fruit
15	/ɔ/	/slɔwɔ/	[ˈsɫɔvɔ̝:]	[ˈsɫɔwɔ]	Слово	word
31	/u/	/ɦarbuz/	[ˈɦarbus:]	[ˈɦarbuz]	Гарбуз	pumpkin

3.2 Allophones of vowels
(20) Allophones of vowels

Num-ber	Allophone	Broad	Narrow	Source	Ukrainian Cyrillic	English gloss
55	/V/ → [V̥] or [V̰] or [V̊] / _#	/mjɑkɪj/	[miˈjakɪ̥]	[mjɐˈkɪɪ̯]	М'який	soft
65	/ɪ/ → [eɪ͡] / C_j	/starɪj/	[ˈstaɾɛɪ͡:]	[stɐˈrɪɪ̯]	Старий	old (adj, masc)
91	/ɪ/ → [ɛ] / _#	/ʃtʃɛbɛtatɪ/	[ʃtʃɛbɛˈtatɛ̥]	[ʃtʃebeˈtate]	Щебетати	bird chirp
84	/a/ → [æ] / _#	/tsjatsʲka/	[ˈts͡æts͡k:ḁ]	[ˈts͡ats͡kɐ]	Цяцька	toy
22	/ɔ/ → [oʊ͡] / /u/_#	/stɔwbur/	[ˈstoʊ͡:vbuɾ̥]	[ˈstɔu̯bʊr]	Стовбур	tree trunk/stump
56	/i/ → [ɪ] / unstressed	/rɛminʲ/	[ˈrɛmɪŋ]	[ˈrɛmʲinʲ]	Ремінь	belt
42	/ɔ/ → [ɔ̃] / /nasal/_C	/mɔʒɛ/	[ˈmɔ̃ʒa̰]	[ˈmɔʒe]	Може	maybe/can
71	/u/ → [ʉ] / /t/ or /d/_C	/tjulɛnʲ/	[tʰʉˈɫʲɛnʲ]	[tʲulɛnʲ]	Тюлень	seal

Here, I provide evidence for allophonic diphthongs. In the spectrograms (21) and (22), the spectrograms show the diphthongs eɪ͡ and oʊ͡. You can see F1 and F2 move to form the vowels forming up the diphthong.

(21) /ukrajina/ = uˈkreĩn̪a:

(22) /stɔwbur/ = [ˈstoʊːʊbuɹ]
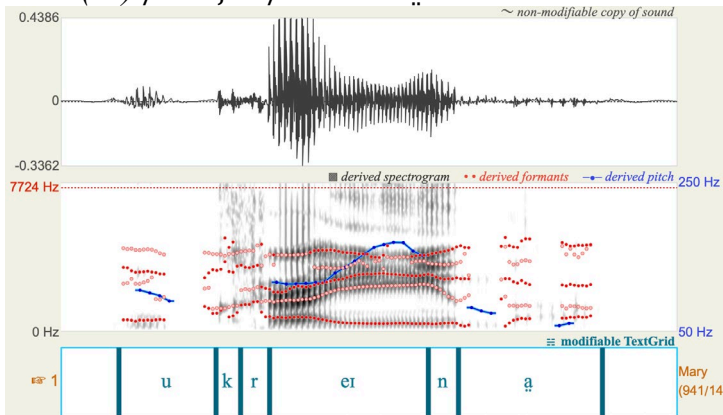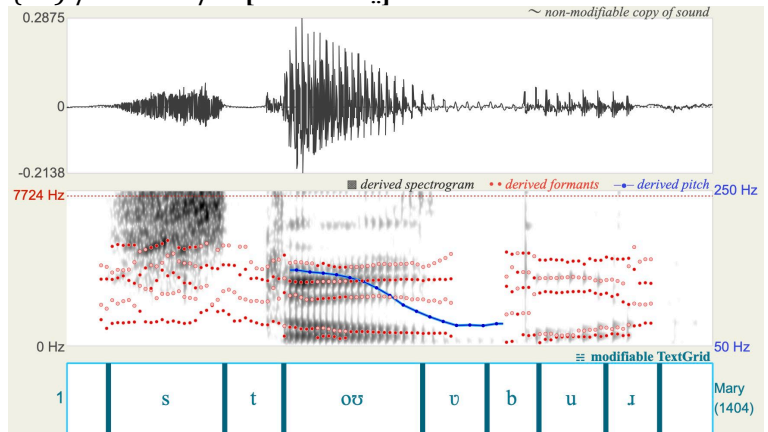
According to Pompino-Marschall, Ukrainian does not have final devoicing, however Maksym devoices final vowels to varying degrees, often with variations of creaky, breathy, or devoiced. This may also be attributed to English phonetic influence.

4. Suprasegmentals

Ukrainian has no contrastive suprasegmentals such asphonemic tones or pitch accents. While stress is not usually contrastive, Pompino-Marschall mentions that there are restrictions on how stress may be placed in utterances. For words of at least four syllables, there may be secondary stress, but it cannot be adjacent to the primary stress. For words with less syllables, there exists only primary stress. The article concludes with the observation that stress position doesn't follow any pattern.

5. Passage

Lastly, as a demonstration of Ukrainian allophones in regular performance, I've recorded an excerpt of "My Thirteenth Year Was Wearing On", a poem by Taras Shevchenko, as read by Maksym. A narrow transcription of Maksym's reading as well as the Cyrillic orthography and the English translation of the meaning [5]. While phonetic utterances of words do not usually have pauses between words as words are a mental construct, I've spaced it out so readers could notice the predictable prosodic stress that emerges, as well as orient themselves within the poem using the indentations and punctuation.

(23) My Thirteenth Year Was Wearing On

Narrow phonemic transcription

ˈmɛ̃ːni trɪˈnastɪj mɪˈnaɫo̥ː.

jɑ ˈpas jɑˈɦn̪ãta za sɛlɔmː.

t͡ʃĩ ˈtak, t͡ʃĩ ˈtɔ tak ˈsɔːnɛt͡ʃk sijaɫo̥ː,

t͡ʃĩ ˈtak' mɛ̃ˈni t͡ʃɔɦɔ ˈbuɫɔ?

mɛˈni ta kɫjubɔ, ˈɫjubɔ staɫɔ,

ˈn̪ɛ̃nat͡ʃɛ̀ ʋ ˈbɔɦa......

uˈʒɛ prɔˈklɪkaɫɪ dɔ ˈpajuː,

a ˈjɑ sɔˈbʲu burj̥aniː

ˈmɔ̃ɫusʲɑ ˈbɔɦuː... ˈʔi nɛ̃z ˈnãju,

ˈt͡ʃɔɦɔ ˈmalɛnʲkɔmə mɛ̃ni

ˈtɔʔjd tak ˈprɪjɑznɔ̃ ˈmɔlɪlɔsʲ,

ˈt͡ʃɔɦɔ tak ˈʋɛsɛlɔ buɫɔː.

'ɦɔspɔˈdnjɛ̃ nɛbɔ, i sɛłɔ,
ˈjaɦnja, ˈzdajɛtsja, ˈwɛsɛłıłɔsʲ!
ˈisɔnts͡ɛ ˈɦriłɔ, nɛ pɛˈkłɔ!
ˈta nɛˈdɔwɦɔ sɔnts͡ɛ ɦriłɔ̽ː,
ˈnɛdɔwɦɔ ˈmɔlıłɔsʲ...
zaˈpɛkłɔ, ˈpɔt͡ʃɛrwɔniłɔ
i ˈraj zaˈpalıłɔ̽ː.

Orthography

Мені тринадцятий минало.
Я пас ягнята за селом.
Чи то так сонечко сіяло,
Чи так мені чого було?
Мені так любо, любо стало,
Неначе в Бога......
Уже прокликали до паю,
А я собі у бур'яні
Молюся Богу... І не знаю,
Чого маленькому мені
Тойді так приязно молилось,
Чого так весело було.
Господнє небо, і село,
Ягня, здається, веселилось!
І сонце гріло, не пекло!
Та недовго сонце гріло,
Недовго молилось...
Запекло, почервоніло
І рай запалило.

Translation [5]

My thirteenth year was wearing on —
Grazing the lambs, one day I was
Beyond the village. The sun shone
Perhaps? or was it without cause?
Such joy, such joy, as at the throne
Of God I felt...
They'd called already for our food,
But I, among the weeds, remained
Alone, and prayed to God. Indeed,
Why I, a small boy, wished to pray
So eagerly, I do not know,
Nor how my happiness was caused.
Around, the village and the Lord's
Sky, the lambs, it seemed, rejoiced,
The sun shone warm—yet did not scorch.
Not long the sun shone fair and warm,

<p style="text-align:center">Not long my prayers I murmured,
The sun blazed fiery red above
And set this heaven burning.</p>

Here are some phenomena that appear in this reading:

- velarized l [ł] appears only when Maksym is on stressed or slower portions of the poem. Otherwise, the velarization is skipped and it appears as a "light" l [l].
- stress becomes predictable in the prosodic recitation of the passage. The first stress and second stress set a sort of beat which I've marked with syllable marks instead of tonal marks as I felt it represented the utterance and perception of the poem better, as Ukrainian isn't a tonal language.
- word final aspiration did not occur as frequently as before as words were influencing each other across word boundaries and not existing as discreet entities such as in the word list.
- nasalization occured more commonly as the flow of the phrase became more of a focus than the precision of enunciation. Thus, as a result nasals affected the neighboring vowels more.
- devoicing of the phrase final vowels and consonants only occured at certain phrase types, such as those which pitched downwards overall, as they were declarative. For those that had overal raising pitch did not display these allophones.

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