

Teaching and learning English phonetics (with computer)

Włodzimierz Sobkowiak

1. Desideratum:

In my dreams, I find CALL software that I can offer students when I discover learning gaps in their grammar. [...] I would like to be able to sit them down with a program and say: "Run the section on adverbs of frequency".

Roy Bowers <rbowers@CIBNOR.CONACYT.MX>, 9th June 1994 on TESLCA-L

2. Concordances

2.1. LMC concordance for "[ra] [aeoui]" (489 lines)

y green man signal is showing.) **After a** short time, the green man signal w
day seven days a week, you see; and **after about** a month I was getting pretty g
e so suddenly come into prominence. **After all**, we have had an industrial syste
lise they are pregnant. Adoption is **another option**, but is a less popular cho
utifully looked after. Couldn't be **better if** they were at home. You've not
etter housed than ever before - and **better educated?** Of course we are: most, b
t people would know. I mean there's **her and** Mr Gorbachev and you struggle to
whether her birthday falls before **or after** the end of the school year.
The accident happened when one of **our editors** (who wishes to remain anonymou
ver, have been changed to preserve **their anonymity**. Becoming pregnant and
" <ART6> Mineral oils come **under examination** CONSUMERS who regula
ch a task? I think every one of us, **whether old** or young, powerful or powerles
e. But if you do inject, always use **your own** set of works. Never share with a
Zebra crossing. The most dangerous **area is** usually marked with zigzag lines -
icle's breakdown occurred within my **area of** responsibility. I was very sorry
supposed to be, you know, the black **area in** London you find, sort of middle-c
lable at the beauty salon. **Barbara is** planning to introduce a specia
st of King's College, who moved to **California in** 1987. Dr Joan White
niques employed: editing decisions, **camera angles**, the way images are juxtapos
times to the States, I've been to **Canada and** I've been to every European cou
ar it said that we are entering the **era of** 'the Learning Society'. Let us hope
d it to be? Diane Abbott: I had an **idea of** what being an MP was like. I had b
quite easily give a concert on just **marimba on** its own umm if the organisers
subject can be treated in different **media or** from different points of view.
assed to Bernard as he sped through **Rwanda and** at the time he was sceptical an
gnancy which he puts over well. The **saga of** fellow tourist Faustin Lusangana
vicious, all-night shelling between **Syria and** Christian gunners who targeted
mably, access to this land would be **via our** drive, which is eight feet in widd
s at subways, footbridges, islands, **Zebra and** Pelican crossings, traffic light

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2.2. LMC concordance for "\" (86 lines)

d Woodifield, and his eyes grew dim remembering. "Now what was it?
rised if the boss had produced a rabbit. "It's whisky, ain't it?"
be better if they were at home. You've not been across, have yer?"
"D'you know what the hotel made the girls pay for a pot of jam?"
I see nobody for half an hour, Macey," said the boss. "Understand?
over, might live their loss down, but not he. How was it possible?
he boy's stepping into his shoes and carrying on where he left off?
ts wings down came a great heavy blot. What would it make of that?
e new-cleaned body yet another dark drop. What about it this time?
dering what it was he had been thinking about before. What was it?
ngman House Journal <ART1> What should I do if I have an accident?
pain at some stage in their life. How does the problem first arise?
ck of my mind a little voice is nagging "what will I wear next year?"
of New Words. Why not become a Longman Wordwatcher yourself?
our copy of Chronicle for details!), but who knows, next year. . . ?
ic Society I'll give it everything I can". 80 MILES IN 20 HOURS?
viewer: So, Diane, when did you first become interested in politics?
the strongest influence in your life towards what you're doing now?
een an MP for five or six weeks now. Is it as you expected it to be?

2.3. LMC concordance for "`" (33 lines)

re they a particularly increasing **'problem'** in this country, but their lives
rrors of our age is the belief that **'the problem of production'** has been solve
say, the most important task now is **'education for leisure'** and, for the poor
e' and, for the poor countries, the **'transfer of technology'**. That things are
an exploiter, this is the fault of **'the system'**. No doubt `the system' is in
the fault of `the system'. No doubt **'the system'** is in many ways bad and must
ss, is this erroneous view that the **'problem of production'** has been solved. A
or when he formulated the so-called **'labour theory of value'**. Now, we have in
Let us take a closer look at this **'natural capital'**. First of lall, and most
rogress along the beaten track, of **'education for leisure'** in the rich countr
sure' in the rich countries, and of **'the transfer of technology'** to the poor c
ssil fuels are merely a part of the **'natural capital'** which we steadfastly ins
-increasing productivity to improve **'the quality of life'** and not merely to in
ow let me return to the question of **'income fuels'** with which I bad previously
ry year, by nuclear energy means to **'solve'** the fuel problem by creating an en
d will not be the only one to have **'a queasy feeling'**. It means solving one p
takes us to the third category of **'natural capital'** which we are recklessly
ies. But this is not what I mean by **'substance'**. The substance of man cannot b

3. Machine-Readable Dictionaries

3.1. FREQUENT WORDS WITH DIFFERENT PRONUNCIATION BR--AM

word	British	American	
------	---------	----------	--

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all	Ol	Ol	across	@'kr0s	@'kras
also	'OlS@U	'OlS0U	almost	'Olm@Ust	'Olm0Ust
another	@'nVD@*	@'nVD@r	answer	'Ans@*	'&ns@r
always	'OlweIz	'OlweIz	air	e@*	e@r
ask	Ask	&sk	anywhere	'enIwe@*	'enIwe@r
after	'Aft@*	'&ft@r	awful	'Of@l	'Of@l
already	Ol'redI	Ol'redI	approach	@'pr@UtS	@'pr0UtS
anybody	'enIb0dI	'enIbadI	advance	@d'vAns	@d'v&ns
although	Ol'D@U	Ol'D0U	across	@'kr0s	@'kras
authority	O'T0rItI	O'TarItI	army	'AmI	'ArmI

3.2. FREQUENT BISYLLABLES WITH SYLLABIC SONORANTS

word	British	syll	bnc_scrp			
able	'eIbl	'VCC	2568	auction	'OkSn	'VCCC 17
action	'&kSn	'VCCC	837	arson	'Asn	'VCC 12
angle	'&Ngl	'VCCC	242	ankle	'&Nkl	'VCCC 10
apple	'&pl	'VCC	48	amble	'&mbl	'VCCC 0
angel	'eIndZI	'VCCC	23	ashen	'&Sn	'VCC 0
ample	'&mpl	'VCCC	18	Asian	'eISn	'VCC 0
				axle	'&ksl	'VCCC 0

3.3. FREQUENT TRISYLLABLES WITH STRESS ON THE PENULT

word	British	stress			
abandon	@'b&nd@n	.=.	abstention	@b'stenSn	.=.
abeyance	@'beI@ns	.=.	abstraction	@b'str&kSn	.=.
abnormal	&b'nOml	.=.	abundance	@'bVnd@ns	.=.
abolish	@'b0IIS	.=.	abundant	@'bVnd@nt	.=.
abortion	@'bOSn	.=.	abusive	@'bjusIv	.=.
abortive	@'bOtIv	.=.	abysmal	@'bIzml	.=.
abrasive	@'breIsIv	.=.	acceptance	@k'sept@ns	.=.
abruptly	@'brVptI	.=.	accomplice	@'kVmplIs	.=.
absorbent	@b'sOb@nt	.=.	accomplish	@'kVmplIS	.=.
absorption	@b'sOpSn	.=.	accordance	@'kOd@ns	.=.
abstemious	@b'stimI@s	.=.	accordion	@'kOdI@n	.=.
			accountant	@'kaUnt@nt	.=.

3.4. WORDS WITH HIATUS

word	British	syll			
a.m.	æI'em	ãV'VC	accruing	@'kruIN	V'CCVVC
AA	æI'eI	ãV'V	acquiesce	ã&kwI'es	ãVCCV'VC
abeyance	@'beI@ns	V'CVVCC	acquire	@'kwaI@*	V'CCVV
			ad nauseam	ã&d'nOzI&m	
					ãVC'CVCVVC

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admire	@d'maI@*	VC'CVV	allaying	@'leIIN	V'CVVC
Aegean	@'dZi@n	V'CVVC	alleviate	@'livIeIt	V'CVVCVVC
AGM	ãeIdZI'em	ãVCV'VC	alliance	@'laI@ns	V'CVVCC
agreeable	@'gri@bl	V'CCVVC	allowance	@'laU@ns	V'CVVCC
agreeing	@'griIN	V'CCVVC	alloying	@'loIIN	V'CVVC
albeit	ãOl'biIt	ãVC'CVVC	allying	@'laIIN	V'CVVC

3.5. PROTOTYPE PHONETIC-ACCESS DICTIONARY

The screenshot shows a software interface for a Polish-English dictionary. The main window is titled "Słownik angielsko-polski" and "Informacje". The search results for "adverb" are displayed, including its phonetic transcription and grammatical information. The "Wytyczne przeszukiwania" (Search criteria) section is also visible, showing options for word form, syllables, and other search parameters.

Słownik angielsko-polski

Słownik Opcje

accent
address
▶ adverb
affix

Wybrano wyrazów: 4

adverb 'ædvɜ:b

n- 01- przysłówek
częstość występowania: 1
grupa tematyczna: language,

Informacje

WORD: adverb
BRITISH: 'ædvɜ:b
AMERICAN: 'ædvɜ:b
POLIGLISH: &dweb
HEAD: adverb
DIF: 3
SYLL: VCCVC
SYLLND: 2
STRESS: =.

Wytyczne przeszukiwania

Wyraz: Dokładnie Maska

Sylaby: Ilość: 2 Akcent

Inne wytyczne: Forma podstawowa Grupa tematyczna: language
 Część mowy: abbr Uściślenie
 Forma gramatyczna: 1st pers p Częstość występowania

Transkrypcja fonetyczna: Brytyjska jest równa amerykańskiej
 Brytyjska jest różna od amerykańskiej
 Uproszczona

4. CALL

4.1. TEXT-TO-IPA CONVERSION ON ZX-SPECTRUM (BELOW LEFT)

PRESS A KEY TO START PHONETIC READER

RARUB	[rarub]
CODEM	[koudəm]
NUKOW	[nɔkɔw]
LYPAT	[laipət]
HEVAZ	[hi:vəz]
KUTIT	[kɔtɪt]
CIDAN	[saɪdən]
GEPOK	[dʒi:pɔk]
CYGAK	[saɪgək]
BELOT	[bi:lɔt]
TOKUL	[tɔukəl]
CAGOS	[keɪgɔs]
KOYOT	[kɔuəɪɔt]
ZOKOT	[zɔukɔt]
PIXAW	[paɪksəw]
LUTEW	[lɔtju:]
GUNOT	[gɔnɔt]
KYTIK	[kaɪtɪks]
ZOTAK	[zɔutək]
SAMET	[seɪmət]

scroll?



4.2. RECORD-YOURSELF FACILITY IN EURO++ "FLYING COLOURS" (ABOVE RIGHT)

4.3. SAMPLE SCREEN FROM THE PHONETICS SECTION OF POP-ENGLISH 3.0 FOR WINDOWS

pop-english 3.0

Vocabulary Grammar Phonetics Configuration My exercises Help

Weak forms - Question 4

Which form of the word will appear in the following sentence?

We shouldn't agree to this, <should> we?

słaba/weak /ʃəd/

mocna/strong /ʃʊd/

English-Polish dictionary

WORD	TRANSCRIPTION	TRANSLATION
agree	[ə'grɪ:]	zgodzać się
agreeable	[ə'grɪ:əbl]	sympatyczny
agreement	[ə'grɪ:mənt]	porozumienie, zgoda

Podręcznik gramatyczny dla...

File Edit Bookmark Help

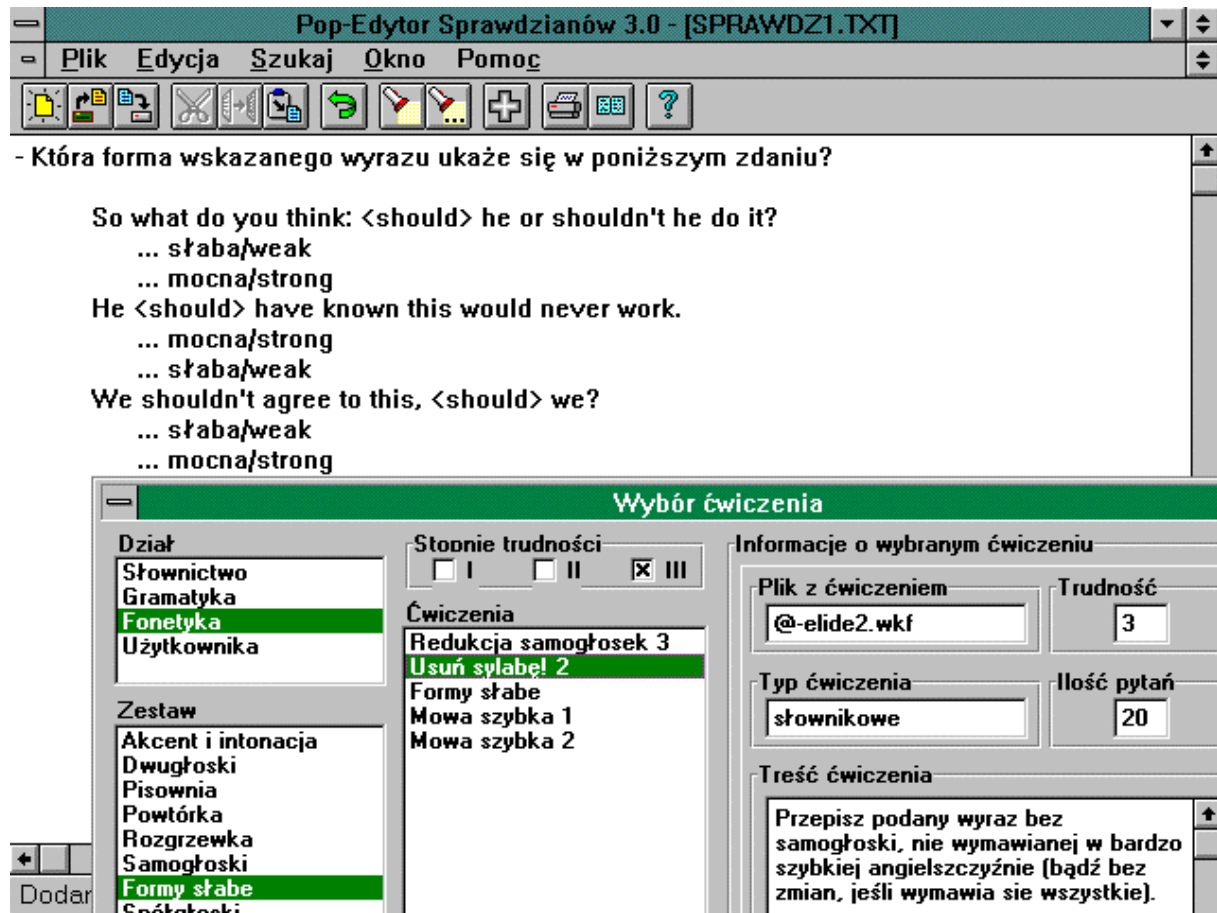
Contents Search Back History

7.3. Wyrazy funkcyjne

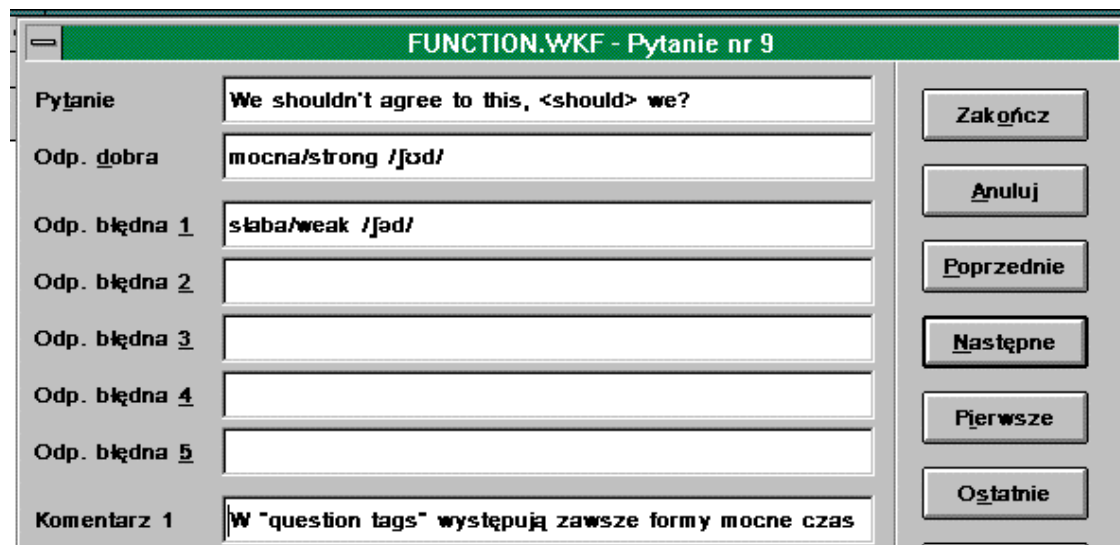
7.3.1. Tzw. 'wyrazy funkcyjne' (gramatyczne), t.j. głównie przedimki, zaimki, przymki, spójniki i czasowniki posiłkowe, są z reguły silnie zredukowane w naturalnej wymowie. Są jednak gramatycznie określone konteksty, w których ich redukcja byłaby błądem. Na

Sound

4.4. SAMPLE SCREEN FROM THE TEST EDITOR OF *POP-ENGLISH 3.0 FOR WINDOWS*



4.5. SAMPLE SCREEN FROM THE EXERCISE EDITOR OF *POP-ENGLISH 3.0 FOR WINDOWS*



4.6. SPEECH RECOGNITION IN *MULTIMEDIA LANGUAGE SYSTEM PLUS!*

What is it: table or garbage can?

Garbage can.

No, this is the garbage can. (With this, the pointer goes to the appropriate object on screen)

Table.

Yes, that's the table.



5. PROBLEMS WITH COMPUTER-ASSISTED PHONETICS TEACHING/LEARNING

- no EFL-oriented speech corpora of English
- no phonetic access in EFL MRDs
- L1-insensitivity of CALL and MRDs
- few pronunciation exercises in CALL and EFL MRDs
- sound-wave visualization: misleading
- no pronunciation evaluation and correction
- mesmerizing power of print

6. SELECTED BIBLIOGRAPHY

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