

From phonetics to phonology: Word forms of the Italian VILLA learners

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GDRI-SLAT Meeting Bergamo, 10-12 March 2016

Correspondences between the four lines of the ELAN transcription as in the standard elaborated for the VILLA data

- *STU artyska tumaczka +... br.. bra... artytska pozdrawia tumaczka
- %pol artystka tłumaczka brazylijka artystka pozdrawia tłumaczka
- %glo artist-F translator-F Brazilian-F artist-F greets translator-F
- %pho [ar'tiska tu'maʦka+.. br +.. bra] [ar'titska poz'drawja tu'maʦka]

Potential misunderstandings of some features of the learner variety if the range of phonetic forms in the learners' output is not paid sufficient attention.

SLA phonology: a functional approach

- a. Is it possible to identify learner varieties for the phonological component of a second language?
 - b. Is it possible to correlate the development of phonology and other system components in a second language?
- It is necessary to look at the phonetics of word forms within the learner variety

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The perspective of the target language
Order of acquisition of the system components

lexicon > morphology & syntax > pragmatics

phonetics > phonology & intonation > intonation

The perspective of the learner varieties

Prebasic variety

Phonetic simplification and different reproductions of target word forms

Variable intonational contours sensitive to the «Focus last» principle (?)

The perspective of the learner varieties

Basic Variety

Stabilization of word forms and constitution of first minimal pairs (?)

Intonational contours sensitive to the «Controller first» principle and to focus particles (e.g. *tez*)

(cf. Andorno 2000)

The perspective of the learner varieties

Postbasic Varieties

Gradual stabilization of phonological rules (?)

Gradual differentiation of intonational contours according to the developing complexity of syntax and pragmatics

(Chini (ed.) 2015)

VILLA

The project supplies reliable data for the phonetics of the initial stage in second language acquisition.

- a. **Input:** range and frequency of words and word combinations in a (probably) stable pronunciation in a teacher talk style
- b. **Output:** range of input words and word combinations with (partially) unstable phonetics in a controllable range of dispersion of forms

VILLA in Italy
Input

Bergamo (form-based)

1076 lexical types, 56327 tokens (0.019)

Pavia (meaning-based)

1053 lexical types, 55529 tokens (0.019)

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Output: FS_5202 (Finite story, Bergamo)
Lexical types: 40; Tokens: 153 (0.261)

1x: 14 types: ['bardzo], [fsta], ['tantʃetç], [toa'leta]
2x: 9 types: [dɔm], [po'zarna], ['vɔwa]
3x-5x: 5 types each: [və], [telefo'nuje], [na]
6x-8x: 2 types each: [tɛʒ], [ʒe'lone]
13x: 1 type: [ni'bjɛski]
30x: 1 type: [pan]

Output: FS_5202 (Finite story, Bergamo)

Range of occurrences in a **stable phonetic form**

38 types/101 occurrences: [tɛʒ] (8x), [ni'bjɛski] (13x)

Range of occurrences in **unstable phonetic forms**

12 types/55 occurrences:

['s:trɛʒa], ['trɛʒak], ['strɛʒak], [stra'ʒakɐ], [stra'ʒaken]
(1+2+2+1+1)

The phonetic component of 5202's learner variety

1. Tolerance for free phonetic variants (pre-allophones?)

Stress: ['pɔʒar], [pɔ 'zɑ:r]

Initial segments: [spi], [ɛpi], [ʃpi]

Internal segments: [pɔ 'kɯi], [pɔ 'kuje], [po 'kuje]

Final segments: ['strazɑ], ['straz^ə]

The phonetic component of 5202's learner variety

2. Relative independence from L1 and L2

[tɛʒ] , ['skakatʃ]

Italian: no word final fricatives

Polish: word final unvoiced fricatives

5202's L2 Polish: word final unvoiced and voiced fricatives

The phonetic component of 5202's learner variety

3. Tendentia typological systemic coherence

Word final segments	V& sonorants	Unvoiced C	Voiced C
5202 L2 Polish	√	√	√
TL Polish	√	√	
L1 Italian	√		

['guze], ['straza], ['straz^ɹ], [po'zair], ['pɔtem]

['strazak], ['tantʃetɕ]

[tɛʒ]

The phonetic component of VILLA learner varieties

Unstable word forms in a cross-sectional perspective

Two important words in the retelling of the Finite Story:

1. Target **też** ‘too’ as the additive focus particle
2. Target **skakać** ‘to jump’, **skacze** ‘he jumps’ as the lexical type involved in the most dramatic segments

Target TEŻ: Input

PV (meaning-based): 215 BG (form-based): 186

To be checked in the teacher's audio files:

- a. whether *też* is pronounced separately and probably with an unvoiced final fricative
- b. frequency of clusters of *też* + following unvoiced/voiced initial consonant, e.g.
też film (PV 4_2), *też bardzo* (BG 2_2)

Target TEŽ: Output

PV: 71 occurrences among 15 learners over 17

Range of occurrences 1-8

Stable form [tɛʃ]

BG: **Unstable forms** among 13 learners over 14

[tɛʃ] 38x/81, [tɛtʃ] 2x/11, [tɛtʃs] 2x/11,

[tɛʒ] 9x/21, [tɛz] 1x/11; [tɛdʒ] 1x/11

[tɛɛ] (1x/11), [tɛe] 2/11

5 learners [tɛʃ], 1 learner [tɛʒ], 5 learners different forms

Target TEŽ

Which factors may be responsible for the
(un)stability of forms in BG and PV?

Cf. attention to the phonetic chain vs. different forms
induced by the different meaning-based vs. form-based
modality of input presentation? (Saturno 2015)

Target SKAKAĆ

Two forms available in the input:

skakać ['skakatɕ] (PV 18; BG 20)

skacze ['skatɕɛ] (PV 40; BG 31)

Cf. BG 3_2: *proszę skakać* (line 478); *ona skacze* (line 481).

Target SKAKAĆ: output

Both input forms seem to convey only the lexical meaning.

5202: pan ni'bjeski 'skakatsf z na z pɔ'kui

5104: 'strazak 'vɔwan i pan 'zɛlɔne 'skatje

Target SKAKAĆ: unstable forms in output

a. Array of forms targeting **skakać**

PV 6; BG 8, cfr. ['skakatɕ, 'skakadz, 'skɛkaf, 'skafaf, 'skataf]

b. Array of forms targeting **skacze**

PV 6; BG 8, cfr. ['skatɕe, 'skafɛ, 'skatɕe, skatɕ, 'skake, 'skatɕke]

c. Array of forms targeting **skrećić** (scil. 'to turn')

PV 6; BG 2, cfr. ['skrɛ̃ntɕitɕ, 'skrɛ̃ntsa, skrentɕ, 'skentɕet]

Target SKAKAĆ: unstable forms in output

a. Array of forms targeting **skakać**

PV 21 occurrences/6 learners; BG 27 occurrences/6 learners

b. Array of forms targeting **skacze**

PV 56 occurrences/11 learners; BG 62 occurrences/10 learners

c. Array of forms targeting **skrećić** (scil. ‘to turn’)

PV 14 occurrences/4 learners; 4 occurrences/1 learner

Target SKAKAĆ

Three types of instability

1. Lexical instability

	skakać			skręcić		
	forms	occurr.	learners	forms	occurr.	learners
PV	12	77	17	6	14	4
BG	16	89	16	2	4	1

PV more lexically unstable than BG. Effect of input presentation without focus on (lexical) forms?

Target SKAKAĆ

Three types of instability

2. Phonetic instability

Forms targeting *skakać* show segmental phonetic instability by maintaining a stable CCV.CVC syllable structure in PV and in BG as well.

['skakatʃ, 'skakadz, 'skɛkaf, 'skafaf, 'skataf]

Target SKAKAĆ

Three types of instability

3. Word instability

Forms targeting *skacze* show segmental phonetic instability **and** restructuring of the CCV.CV syllable structure, resorting to CCVC, CCVC.CV in PV and in BG as well

['skaf̩e, 'skafe, 'skatse, **skaf̩ʃ**, **'skaf̩ʃke**]

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- a. The instability of the forms targeting *skakać* seems to point to a stable word form in a pre-phonological format allowing a large range of free (allo)phonic variation.
- b. The instability of the forms targeting *skacze* seems to anticipate formats of stable word forms reflecting the endings of the target in a pre-morphological format.
- c. Point b. may be confirmed by the same kinds of instability found with the lexical (semantically wrong) target type *skręcić*, opposing competing forms such as ['skrẽntʃitʃ] vs. ['skrẽntsa, skrẽntʃ]

Final remarks

The kind of learner variety resorting after the 14 hours of the VILLA course may be related to the pre-basic variety in phonology and morphology, not in the likely presence of different word classes.

Final remarks

The type of input presentation does not seem to affect the ability to identify word forms sensitive to morphological variation. As a matter of fact, the only first pre-morphological differentiation according to a target format is found in the (meaning-based) PV learner 5106.

[pan ze'loni nje 'lubi 'skakatʃ] (FS_5106 line 67)

[pan ni'bjɛski skatʃ] (FS_5106 line 73)

Final question

Does the VILLA learners' L1 affect the organization of the learner variety as found in the Italian learners?

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['dʒɛŋk], ['zɛŋge], ['ʒɛŋki]

['dʒɛ̃w̃ŋki]