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Jean-Francois Mondon  
*Swarthmore College*

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## A Reassessment of Anti-Homophony in Bulgarian

### Abstract

This paper discusses an apparent synchronic case of homophony avoidance in the Trigrad dialect of Bulgarian. Section 2 lays out the facts and summarizes Crosswhite's (1997) OT-based solution to the aberrant phonology. Section 3 discusses various problems with Crosswhite's proposal while section 4 offers a different perspective on homophony and its position both synchronically and diachronically adopting Labov's (1994) Facultative Model.

# A Reassessment of Anti-Homophony in Bulgarian

Jean-François Mondon

## 1 Introduction

This paper discusses an apparent synchronic case of homophony avoidance in the Trigrad dialect of Bulgarian. Section 2 lays out the facts and summarizes Crosswhite's (1997) OT-based solution to the aberrant phonology. Section 3 discusses various problems with Crosswhite's proposal while section 4 offers a different perspective on homophony and its position, both synchronically and diachronically, adopting Labov's (1994) Facultative Model.

## 2 Background

### 2.1 Facts

The Trigrad dialect of Bulgarian is similar to the standard language in exhibiting vowel reduction of unstressed mid-vowels.<sup>1</sup> However, the Trigrad dialect (as is indicative of the Rhodope dialect group in general, of which Trigrad is a member, cf. Miletič, 1912) tends to lower unstressed mid-vowels as opposed to raising them, as is the norm in the Standard language (cf. Scatton, 1984: 19; 72). The vocalic system of Trigrad is as follows:

(1) Trigrad Vowel System (cf. Crosswhite 1997:2)

<u>Stressed</u>		<u>Unstressed</u>	
i	u	i	u
e	o	e	
ɛ	ɔ		
	a		a

In unstressed syllables underlying /o/ and /ɔ/ are lowered to [a].<sup>2</sup> This is observable in both roots and inflectional endings as illustrated in (2), in which every morpheme is underlyingly unstressed except for the definite articles *te* and *to* which are pre-accenting:

(2) Vowel Reduction of Mid-back Vowels

/rog/	'horn'	→	[róg]
/rog-ave/	'horns'	→	[rógave]
/rog-avé-te/	'the horns'	→	[ragavéte]
/ok-o/	'eye'	→	[óka]
/ok-ó-to/	'the eye'	→	[akóta]

What is interesting about this vowel reduction rule is that it appears not to occur in three specific instances: i.) the singular of some neuter nouns, ii.) the nominative singular of masculine animate nouns, and iii.) predicative adjectives. Crosswhite (1997) offers the same explanation for all three of these irregularities, namely the avoidance of homophony with a paradigmatically related form. In the case of the neuters she proposes that if reduction had taken place for those

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<sup>1</sup>Trigrad is a largely Muslim village located in Southern Bulgaria. The data for this section comes from fieldwork done by Stojko Stojkov in 1961 (published as Stojkov, 1963) when the town consisted of about 835 inhabitants.

<sup>2</sup>Underlying /ɛ/ is raised to [e].

nouns which possess fixed root-accent, homophony would have resulted with the plural form ending in *-a*. The forms given in (3a) undergo reduction in the singular, since the movement of stress between the singular and plural forms ensures that both will differ on the surface. Compare those forms with the singular forms in (3b), which do not undergo reduction since homophony with the plural would result<sup>3</sup>:

## (3) Singular of Neuter Nouns

a. <u>sg</u>			<u>pl</u>	
/klɔb-o/	→	klóba	klabá	'globe'
/per-o/	→	péra	perá	'pen'
/varzal-o/	→	varzála	varzalá	'morning point'
a. <u>sg</u>			<u>pl</u>	
/zɔrn-o/	→	zórno	zórna	'grain'
/petal-o/	→	pétalo	pétala	'horseshoe'
/blag-o/	→	blágo	blága	'good, blessing'
/tsigaril-o/	→	tsigarílo	tsigaríla	'cigarette'

For the nominative singular of masculine animate forms Crosswhite proposes that failure of lowering averts homophony with the accusative singular form:

## (4) Nominative of Animate Masculine Nouns

	<u>nominative</u>			<u>accusative</u>	
	/ago/	→	ágo	ága	'older brother'
	/dajčo/	→	dájčo	dájča	'uncle'

Finally, Crosswhite posits that reduction in the predicative forms of adjectives is prevented from occurring to avoid homophony with the paradigmatically related attributive forms. In this dialect there is a German-type contrast between attributive adjectives, which agree in gender with a following noun, and predicative adjectives, which do not agree with a noun. The predicative forms have generalized what historically was the neuter (i.e. /o/) for all genders throughout the singular (Stojkov, 1963: 15; 17ff). Therefore, a desire to avoid homophony with a paradigmatically related form only surfaces in the attributive neuter (which ends in /o/ → [a]) and the attributive feminine (which ends in /a/). Observe the reduction of /o/ in the neuter attributive adjectives in (5) and the failure of such reduction in predicative forms in (6) (NB: all translations are from Crosswhite, 1997: 6-7):

(5) Attributive Adjectives

/slep-o/	→	slépa	<i>in</i>	slépa óka	'blind eye'
/xubav-o/	→	xúbava	<i>in</i>	xúbava séna	'good hay'

(6) Predicative Adjectives<sup>4</sup>

<b>Bólno</b>	si	sam	'I am sick'
<i>sick</i>	<i>I</i>	<i>am</i>	

<sup>3</sup>I wish to emphasize that Stojkov (p. 14ff) does show that variation between *-o* and *-a* is still alive in neuter nouns (cf. the two forms of the sg. /agnivo/ 'steel', *agníva* with reduction and *agnívo* without it). Though I do not go into detail on this point in the text, I view this variation as grammar competition. The older grammar consists of an unconditioned rule lowering unstressed /o/ to [a] (thus yielding *agníva*) while the new grammar is what will be presented in section 4 below (and which yields *agnívo*).

<sup>4</sup>Note that the past tense is declined like an adjective as in Russian, reflecting its historical origin as a verbal adjectival form.

<b>Vidélo</b>	ga	xubaf	mɔf	‘(A) handsome man saw him.’
<i>see-adj.</i>	<i>him</i>	<i>handsome</i>	<i>man</i>	

Due to limitations of space, the remainder of this paper will primarily only focus on the homophony avoidance in the neuter nouns. For a thorough discussion of the predicative/attributive adjectives and agent nouns, see Mondon (2009).

## 2.2 OT Analysis

Crosswhite uses OT to offer a synchronic account of these facts. She proposes a correspondence constraint ANTI-IDENT:

- (7) For two forms,  $S_1$  and  $S_2$ , where  $S_1 \neq S_2$ ,  
 $\exists \alpha, \alpha \in S_1$ , such that  $\alpha \neq \mathfrak{R}(\alpha)$

“This constraint states that for two forms,  $S_1$  and  $S_2$ , there must be some segment  $a$  which is a member of  $S_1$  such that  $a$  is not identical to its correspondent in  $S_2$ . ANTI-IDENT also requires that  $S_1$  and  $S_2$  are not ‘the same’. This requirement ensures that ANTI-IDENT won’t apply to forms that are supposed to be identical, i.e., it will not affect forms that are underlyingly [sic] identical.” (Crosswhite, 1997: 8)

Coupled with a constraint against unstressed mid-vowels (\*o) all the surface forms are accounted for. Two examples from the neuter singulars are given in (8). In the first tableau the reduced form wins since no homophony results (since the plural form differs in stress placement) while the unreduced form wins in the second tableau in order to prevent a violation of high-ranked ANTI-IDENT.<sup>5</sup>

(8)

/klɔbo/ ‘globe’	ANTI-IDENT	*o
☞ klɔba		
klɔbo		*!

/zɔrno/ ‘grain’	ANTI-IDENT	*o
zɔrna	* (pl: zɔrna)	
☞ zɔrno		*

<sup>5</sup>The notion of homophony avoidance has seen an increase in interest within the past few years. The idea of a synchronic homophony avoidance constraint between lexically related words has been adopted by Kenstowicz (2002, 2005), Kenstowicz & Sohn (2007) and Itô & Mester (2004). Ichimura (2001, 2006) is unique in applying homophony avoidance to words which are not lexically related. Blevins (2004a, 2004b, 2005) as well as Gessner & Hansson (2004) — though not adopting an OT homophony avoidance constraint — have presented solutions to synchronic puzzles by reference to diachronic homophony avoidance. For a critical discussion of all of the facts presented by these authors as well as others see Mondon (2009).

### 3 Problems with Anti-Ident

There are several problems with introducing Anti-Ident into the synchronic grammar. The first striking problem is the clear violation of Anti-Ident in the attributive adjectives (cf. 5). If the avoidance of homophony in a paradigm is of paramount importance, then why is the homophony in the attributive between the feminine and the neuter, which is also brought about by lowering of the latter (fem. /a/ and nt. /o/ → [a] respectively), allowed?

Additionally, it is intuitively odd that Anti-Ident would keep attributive and predicative adjectives phonologically apart. The two forms differ enough syntactically so as to alleviate any confusion that could possibly occur.

Further problems with encoding homophony avoidance into the grammar do not arise specifically in the Bulgarian case but occur with other data. For example in Kenstowicz' discussion of homophony avoidance in Arabic dialects (Kenstowicz, 2002, 2005; cf. Mondon, 2009, ch. 2), he draws a distinction between grammatical homophony avoidance and pragmatic homophony avoidance. The former is effectively what has been presented up till now. It involves the active presence of a homophony avoidance constraint in the grammar. He proposes the latter, however, in order to account for the effect of adding dative clitics to participles in Makkan Arabic. The dative clitic shortens a preceding long V in a closed syllable (-VVC.-l- > -VC.-l-):

(9)		<u>'written'</u>	<u>'written to X'</u>
	sg. masc.	<i>maktuub</i>	<i>maktub#-l-u</i>
	sg. fem.	<i>maktuub-a</i>	<i>maktuub-at#-l-u</i>
	pl. masc.	<i>maktuub-iin</i>	<i>maktuub-in#-l-u</i>
	pl. fem.	<i>matuub-aat</i>	----

However, the expected shortening does not occur in the 3<sup>rd</sup> pl. fem. and in fact no synthetic form occurs at all. Kenstowicz accounts for this by a pragmatic maxim requiring clarity ('be clear'). If the vowel shortening were to occur in the 3<sup>rd</sup> pl. fem. then the distinction between the feminine sg. and pl. would disappear, both being *maktuubatlu*.

Kenstowicz is forced to treat this case differently from the Bulgarian case. If this case involved the same grammatical constraint on homophony (Anti-Ident) as in Bulgarian, then the constraint hierarchy would still produce a form. There would be no reason to explain why apparent ineffability should result in this case but not in Bulgarian. The only way around this, which is what Kenstowicz does, is to assume that it is a different type of homophony avoidance  $\frac{3}{4}$  one that is tied to pragmatics and not to the grammar. Needless to say this dichotomy is a weakness which could only be improved upon if a clear delineation between the two homophonies could be discerned. As it stands it is not at all evident why some forms are subject to grammatical homophony avoidance while others are only subject to pragmatic homophony avoidance.

Finally, adopting an Anti-Ident approach is very problematic for the regularity of sound change, which should apply regardless of the results. The Anti-Ident solution only offers a very weak, ad-hoc reason for why we do not see homophony avoidance occur more frequently; namely, because it can only occur where it is ranked sufficiently high in a language's constraint ranking.

### 4 Alternative Solution

I propose that no notion of homophony avoidance is encoded in the grammar in any module, be it phonology, morphology, or syntax. This leaves two questions to be answered then. First, how did the Bulgarian case come about historically in apparent violation of the Regularity of Sound Change? Second, how is it encoded synchronically? I will attack the former question in the next section and then offer a brief outline of a possible solution to the second question.<sup>6</sup>

<sup>6</sup>For a more detailed synchronic solution of the Bulgarian data see Mondon (2009), ch. 2.

#### 4.1 Variant-Choice & Facultative Theories

I interpret apparent cases of homophony avoidance in a synchronic grammar as the result of situations in which a sound change never went to completion.<sup>7</sup> The sound change did in fact occur in the homophonous environments but it did not progress past a stage of variation. During this variation period speakers possessed both options (i.e. the original form and the new form) but the older form was selected more often when speakers were aware of an uncomfortable homophony which could (in their opinion) impair communication.<sup>8</sup> It should be clear that this notion of homophony avoidance is related to Kenstowicz's notion of pragmatic homophony avoidance (see the last section).

The idea that miscommunication can make use of competing variants is not novel; it has been expressed in work by Tony Kroch among others:

- (10) "We know that linguistic communication often fails for mechanical reasons. Noise, inattention, and other factors can cause listeners to fail to understand what their interlocutor is saying. When this happens, it may go unnoticed, but it is more likely to prompt listeners to ask for clarification or speakers to explain themselves after noticing spontaneously that something has gone amiss." (Kroch, 1989: 150)

The effect of this theory is an increase in the frequency of the older variant (as opposed to the newer variant which has undergone the sound change) in the speech data children are exposed to. I believe, however, that this theory alone cannot account for a wholesale prevention of a sound change from going to completion in a given morphological environment. As emphasized by Labov (1994), the conscious control of speech does not appear to have long-range effects on language structure. Therefore, something else must be encouraging the use of older variants.

Labov determines that the reason a perfectly regular sound change can be effectively stunted in a particular homophony-inducing morphological environment is due to the fact that a large number of the newer variants are misanalyzed as the homophonous form. Therefore, the sound change will appear to be robust everywhere except in this particular morphological environment. Subsequent generations of speakers will acquire this difference and take the sound change to completion everywhere but in this one morphological environment. *Homophony, then, will have been avoided through archaism.*<sup>9</sup> In order to incorporate homophony avoidance into the classes of principled exceptions to the regularity of sound change, such as diffusion across dialect boundaries (cf. Hock, 1991: 432ff) and taboo deformation (Hock, 1991: 303ff), it is imperative that an objective model be presented which can specifically account for how misanalyzed forms are treated by learners of a language.

Labov does just this by presenting two different models for how homophonous forms are calculated and dealt with by learners: the Privative and the Facultative Theories (p. 588-595). Both theories differentiate between unsupported forms and supported forms. The former are completely ambiguous in the stream of speech. No disambiguating information is provided in the sentence or in the context. The latter are just the reverse. While the word alone is homophonous between two different morphological options, the context provides sufficient information indicating which form is being used. The Privative Theory treats all unsupported forms as the unmarked variant. Therefore, in those Spanish dialects which delete final *-s*, all zero-plurals will be heard as singulars.<sup>10</sup> The Facultative Theory, on the other hand, treats all unsupported homophonous forms as completely ambiguous. In the Spanish case then, unsupported zero-plurals and unsupported singulars are both ambiguous. Continuing with the Spanish example, Labov illustrates that the Privative Theory has the problem of always reducing the deletion rate in the plural if there is at least one ambiguous plural. This is clearly undesirable since this effectively

<sup>7</sup>The ideas in this section arose largely in conversation with Gene Buckley and Don Ringe.

<sup>8</sup>An example from English would be the clear pronunciation of the final coronal in *can't* so as not to confuse it with *can*.

<sup>9</sup>I thank Rolf Noyer for this succinct statement.

<sup>10</sup>In Spanish final *-s* is the mark of the plural in nouns.

predicts that any sound change which results in a homophonous output will not go to completion in that morphological environment.

The Facultative Theory, on the other hand, provides a mechanism which will allow a sound change to continue in a homophony-inducing environment if the ambiguity resulting from the sound change is not too great. Labov illustrates this nicely using the Spanish case of final *s*-deletion. Imagine that there are 200 plurals and the deletion rate of final *-s* is 20%. Therefore, 40 of these 200 plurals will have deleted *-s*. Assume further that of these 40 'zero' plurals, 2 are unsupported. This results in 198 forms which will be understood as plurals. Imagine now that there are 400 singulars, 20 of which are unsupported:

(11) Facultative Theory and the Spanish plural with Small number of unsupported plurals  
(Labov 1994: 591-595)

<u>Plurals</u>	
with <i>-s</i>	160
clear no <i>-s</i>	38
<u>unsupported</u>	<u>2</u>
Total	200

  

<u>Singulars</u>	
supported	380
<u>unsupported</u>	<u>20</u>
Total	400

The total number of supported forms is 578 (198 plurals and 380 singulars). The perceived proportion of plurals is therefore 198/578 or 34.3%. Using this percentage we can estimate how many of the unsupported words should be plurals:  $.343 \times 22 = 8$ . Thus, the number of inferred plurals is 46; that is, 38 supported zeroes + 8 estimated plurals. Therefore, the number of inferred plurals uttered is 206 (160 plurals with *-s* + 38 supported zeroes + 8 estimated plurals). We can now calculate the inferred deletion rate of plural *-s* by dividing the inferred number of zeros by the number of inferred plurals uttered:  $46/206 = 22.2\%$ . The end result is that despite the homophony which results from deleting plural *-s*, the rate of deletion has increased from 20% to 22.2% in this morphological environment.

What would happen if the number of unsupported zeroes were large? For instance, imagine that of the 40 zero plurals, 30 were ambiguous and not 2 as in the previous account. How would this affect the rate of deletion in the plural environment for the next generation of speakers?

(12) Facultative Theory with Large number of unsupported plurals

<u>Plurals</u>	
with <i>-s</i>	160
clear no <i>-s</i>	<b>10</b>
<u>unsupported</u>	<u><b>30</b></u>
Total	200

  

<u>Singulars</u>	
supported	380
<u>unsupported</u>	<u>20</u>
Total	400

Since only 170 forms would be perceived as plurals (160 plurals in *-s* + 10 supported zeros), the perceived proportion of plurals would drop: number of perceived plurals / total supported forms ( $170 / (170 \text{ plurals} + 380 \text{ singulars}) = 30.9\%$ ). Using this rate we can again estimate how many of the unsupported zero forms are plurals:  $.309 \times 50$  (30 unsupported plurals + 20 unsupported singulars) = 15. The number of inferred plurals uttered is now 185 (160 plurals in *-s* + 10 supported zeroes + 15 estimated unsupported zeroes). The new rate of deletion of plural *-s* is the



number of zeroes / inferred plurals uttered = 25 / 185 = 13.5%. The rate of *-s* deletion in the morphological category plural would have dropped from the initial 20%!

We can conclude, therefore, that those cases in which homophony did not prevent a sound change from occurring in a certain morphological environment simply did not result in a high enough number of unsupported ambiguous forms. Those cases in which a sound change was prevented from going to completion in a given morphological environment *had too many ambiguous forms*. Subsequent generations did not have enough unambiguous, supported forms to verify for themselves that the sound change did in fact occur in the morphological environment under question.<sup>11</sup> As a result, with each generation the sound change will decrease in its frequency in this one morphological environment while it will be increasing elsewhere. The conscious will of the speaker is never in play. As succinctly stated by Labov (p. 598), “There is a part of language behavior that is subject to conscious control, to deliberate choice, to purposeful and reflective behavior. But as far as I can see, it is not a major part of the language faculty, and it has relatively little influence on the long-range development of language structure. That is not to deny that we have intentions, goals, and aims in life. But what those intentions are, and what the motivations for our actions may be, is not as accessible as some formal and reflective linguists would like to believe.”

#### 4.2 Alternative Synchronic Analysis of Bulgarian

The historical development of the Bulgarian neuter nouns was the following:

(13)		<u>Neuter Nouns</u>	
		<u>alternate stress</u>	<u>fixed stress</u>
	1. pre-Trigrad Bulgarian	*-o	*-o
	2. *o > a	-o ~ -a	-o ~ -a
	3. variation becomes lopsided	-a >> -o	-o >> -a
4. Trigrad Bulgarian	-a	-o <sup>12</sup>	

During stage 2 speakers tended to favor the variant which circumvented possible miscommunication via the Variant Choice and Facultative Theories. The neuter nominative variant *pétalo* 'horseshoe' would have been chosen more by speakers than its variant *pétala* since the former would not lead to possible miscommunication because of its homophony with the plural *pétala* (à la Variant Choice Theory). Similarly its competitor in the singular *pétala* would itself have led to a surplus of unsupported forms (à la Facultative Theory). On the other hand *péra* 'pen' would not have been less favored with respect to its variant *péro* since the former differed from the plural by stress (*perá*). Over time, as the [o] variant became much more frequent in *pétalo* and words like it, children would lose any knowledge that the variant with vowel reduction was even possible (i.e. \*pétala). The children would then restructure the grammar.

Such a restructuring is possible if the vowel reduction rule is refined in such a way  $\frac{3}{4}$  by specifying more specific phonological conditions  $\frac{3}{4}$  so that it will not apply in those nouns with fixed stress. I propose that the reduction of unstressed /o/ has been split into two synchronic rules. One applies categorically word-internally while the other applies word-finally only when /o/ is not part of a foot:

(14) Two synchronic rules of /o/ reduction<sup>13</sup>

<sup>11</sup>Additionally, in line with the Variant Choice Theory, older forms must have been favored by speakers in certain reflective contexts, thus adding pre-sound change forms to the pool of data which children acquiring the language were subject to.

<sup>12</sup>See fn. 3.

<sup>13</sup>Recall that reduction applies to both /o/ and /ɔ/. I use /o/ throughout as a cover symbol for both vowels.

- a. 
$$o \rightarrow a / \begin{array}{c} \mu \quad \mu \\ | \quad | \\ \_ \quad V \end{array}$$
- b.  $-o\# \rightarrow [a]$  when unfooted<sup>14</sup>

Some forms of interest which were given in (3) are repeated below:

(15) Neuter Singular

a.	<u>sg</u>		<u>pl</u>	
	/klɔb-o/	→ klɔba	klabá	‘globe’
	/per-o/	→ péra	perá	‘pen’
b.	<u>sg.</u>		<u>pl.</u>	
	/zɔrn-o/	→ zórno	zórna	‘grain’
	/petal-o/	→ pétalo	pétala	‘horseshoe’
	/blag-o/	→ blágo	blága	‘good, blessing’
	/tsigaril-o/	→ tsigarílo	tsigaríla	‘cigarette’

Looking at the forms in (15a), it is clear that the root cannot be underlyingly stressed and that the plural suffix *-a* must itself be underlyingly stressed. On the other hand, the roots in (15b) must be underlyingly stressed since the accent is not moved to the plural suffix. In the plural forms of the nouns in (15b), both the root and the plural suffix are underlyingly stressed; as is typical of Slavic languages which retain free accent, only the leftmost stressed syllable bears the stress on the surface (cf. Halle, 1997). Adopting the metrical theory of Halle & Idsardi (1995), all the forms can be represented underlyingly as follows:

(16) Underlying Stress of Neuter Nouns

<b>Singular</b>	<b>Plural</b>	<b>Singular</b>	<b>Plural</b>
* *	* (*	(* *	(* (*
klɔb-o	klɔb-á	zɔrn-o	zɔrn-a
* *	* (*	(* * *	(* * (*
per-o	per-á	pétal- o	pétal-a
		(* *	(* (*
		blág-o	blág-a
		* * (* *	* * (* (*
		tsigaríl-o	tsigaríl-a

The rule reducing word-final /o/ to [a] when unfooted will apply before the rules of stress assignment occur. In this way, only the forms in (15a) will undergo final /o/ reduction and not the forms in (15b) whose underlyingly stressed root syllable incorporates /o/ into a foot.

If these were the only forms under consideration, then the Trigrad stress system would be very similar to that of Russian, utilizing the same parameter settings as established by Halle & Idsardi (1995: 415ff).<sup>15</sup>

<sup>14</sup>Cf. Idsardi (1992: 122ff) for discussion of the sensitivity to foot structure that a phonological rule converting low [o] to mid [ô] (Idsardi's notation) in Russian dialects spoken in Rjazan'.

<sup>15</sup>The Project parameter places a left parenthesis to the left of an underlyingly stressed syllable as in (16) above. The line 0 Edge Rule places a right parenthesis to the right of the rightmost element in the word while the line 1 Edge Rule does the exact opposite, placing a left parenthesis to the left of the leftmost element on

(17) Line 0

Project: L  
 Edge: RRR  
 Head: L

Line 1

Edge: LLL  
 Head: L

Words like *varzála* (sg) ‘morning point’ pose a problem. Since the initial syllable is not stressed in the singular (the default position), one would imagine that the medial syllable is underlyingly stressed just like *tsigarílo* ‘cigarette’. However, if this were the case, then stress on the medial syllable should surface in the plural *\*\*varzála* (cf. *tsigaríla*) and reduction should not occur in the singular *\*\*[varzálo]* since the final /o/ would be in a foot. This word seems similar to a class of words in Russian which appear to have their underlying root accent lost in the plural. For instance, the noun *profěssor* loses its underlying accent in the plural *profěssorá* (Halle, 1997: 286, fn. 7). While such an analysis could easily work for Standard Bulgarian, it can hardly work for the Trigrad dialect since, as already mentioned, if we treat words like /varzalo/ as being underlyingly stressed in the singular then the rule reducing final /o/ when unfooted will not apply.

The simplest way out of this dilemma is to introduce the Iterative Constituent Construction (ICC) which “inserts a {left/right} parenthesis for each pair of elements” (Halle & Idsardi, 1995: 418)<sup>16</sup> and to apply two stipulations to it: i.) it only occurs once (i.e. it does not iterate across the word) and ii.) it only occurs when the final element of the word is not stressed. Compare the line 0 derivation of the singular and plural of [varzála] and [varzalá].

(18) Line 0

<i>Project</i>	* * *	* * (*
	varzal-o	varzal-a
<i>-o# &gt; -a</i>	* * *	n/a
	varzal-a	
<i>ICC</i>	* (* *	
	varzal-a	n/a
<i>Edge</i>	* (* *)	* * (*)
	varzal-a	varzal-a

These two stipulations placed on the ICC are completely novel, as far as I am aware. While this may render this solution undesirable, it should be noted that it does explain why no neuter noun with alternating accent given by Stojkov moves the stress between the antepenult and the final syllable. There would be no way for such a word to arise under the system developed here. If the antepenult is stressed then it must be underlyingly stressed and it should not, therefore, exhibit final reduction of /o/ to [a].

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line 1. The Head Rule selects one element from each foot to raise to the next line. In both lines 0 and 1 it is the leftmost element in each foot which is raised.

<sup>16</sup>If it is set to L, then it inserts a left parenthesis after every pair of stressable elements starting from the right. If it is set to R, then exactly the reverse takes place: a right parenthesis is inserted after every pair of stressable elements going from left to right.

## 5 Conclusion

This paper presented and rejected any notion of a constraint Avoid-Homophony in the synchronic grammar. Rather, it adopted a model from Labov (1994) which clearly explains how the regularity of sound change can be compromised via misanalyses in child language acquisition. Finally, this paper concluded with a brief synchronic analysis of the Bulgarian neuter nouns in Halle & Idsardi's 'bracket and erasure framework'.

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Jean-François Mondon  
 Swarthmore College  
 jfmondon@gmail.com