

SEGMENTAL PHONOLOGY OF THE BULGARIAN ENGLISH INTERLANGUAGE(S)

Andrei Danchev

INTRODUCTORY NOTES

This paper¹ considers some data on how Bulgarian learners perceive and produce the sounds of English. The study is confined to segmental phonology, as the suprasegmental characteristics of the Bulgarian English Interlanguage (henceforth BEIL) have still not been investigated sufficiently (for some preliminary studies and observations cf. Dimova 1975, Yordanova 1985 and also Danchev 1980/1984). The description of the BEIL is based mainly on perceptual and productive data, although some acoustic measurements have been taken into account as well. The perceptual data are from empirical classroom observations of both oral and written (mostly dictations) speech production. Various kinds of learners — high-school and university students, as well as adult learners on intensive courses (usually five months with thirty hours a week) — have been investigated. Public usage in assimilating English loan-words has been taken into consideration too. The first kind of evidence is naturally weightier, whereas the second just provides additional illustration.

Although some typically Bulgarian deviations in the pronunciation of English have already been reported on by a number of authors (e. g. Mincoff 1973, Danchev 1975, 1984, Despotova 1978), there is still no comprehensive study. Nor is a systematic overall phonological contrastive analysis of the two languages available. The present paper highlights some of the most striking instances of the English-Bulgarian phonological contact without pursuing any particular points in any great detail.

The analysis is from the point of view of the R. P. variety of British English (or 'General English' — cf. Lewis 1985), on which instruction in this country has been mostly based. But since the influence of American English has been felt too, a broader background has been envisaged in a number of cases.

The title of this paper suggests that the BEIL will be considered both as an aggregate notion and as consisting of a variety of interlanguages. This would imply that the aggregate notion refers to the IL features that emerge as universal, regardless of the type of learners and the instruction they have been exposed to. The aggregate notion includes varieties which depend on learner motivation, teaching and learner strategies, etc.

Allowing for the fact that motivation can change, the various types (for details cf., e. g., Solmecke 1983) in this case can be reduced to the well-known distinction between integrative and instrumental motivation. Those who study the language for their future professional work with it (e. g. as teachers, interpreters, etc.) often have a prevailing integrative motivation. On the other hand, there are those learners, and they constitute the vast majority of people who study English in this country, who have a more or less utilitarian attitude, that is, they need English as a means of international communication (more often than not Bulgarians use English to communicate with non-native speakers).

In addition to the variationist approach outlined so far, some attention has also been paid to variability within the same IL, reflecting to some extent the recent increased interest in this aspect of IL study (cf. e. g. Ellis 1985).

This is a basically qualitative description of errors in the sense that no explicit statistics have been provided. However, implicit quantitative judgments are contained in statements about 'typical' errors. Of the three possible dimensions of error analysis — qualitative, quantitative and longitudinal (the variationist factor cutting across all three aspects) — the emphasis is therefore on the first, with occasional longitudinal observations.

1. Stressed vowels

1.1. Vowel Quantity

Some of the most frequently recurring errors in the production of the English stressed vowels by Bulgarian learners concern vowel quantity.² Bulgarian being a language without phonological vowel quantity, Bulgarian learners of English predictably tend to shorten the long vowels and to lengthen the short vowels of English. As a result most vowels in the Bulgarian English interlanguages are neither short nor long, assuming an intermediate duration instead. According to experimental measurements the short /i/ of English is longer by about 12% when pronounced by Bulgarians (for details cf. Despotova 1978:33). The same strategy is applied by Bulgarian learners of German and generally by various groups of non-Bulgarian learners of English (cf., e. g., the data in Vidović 1972; Rubach 1984; Chitoran et al 1984). Consequently minimal pairs such as lip — leap, live — leave, rich — reach, ship — sheep, slip — sleep, this — these, full — fool, pull — pool, cot — court, pot — port and many others mostly do not exist in the various Bulgarian English interlanguages, especially during the beginner stages.

Auditory data of this kind abound and can easily be supplemented with written data from dictations and other written work. The confusion of short and long vowels is reflected in examples such as *steal/steel* and *reach* instead of *still* and *rich* (cf. Danchev 1980/1984), and one can also refer to *dip*, *theack* and *spiking* (Moskovska 1983) and to the not infrequent interchange of *live* and *leave* (mentioned also in Yordanova 1975), although the students who make these mistakes usually know both words of the respective pairs.

Bulgarian learners can be made somewhat more aware of the above mentioned oppositions in English if the alternative diphthongal /ij/ transcription is used instead of the traditional /i:/ (in fact, the optimal transcription would be /i:~ij/), which has already been used in Danchev 1979/1982), because they can identify it with practically the same sound in Bulgarian, spelled **ий**, e. g. in words such as **пий** /pij/, imperative forms of **пия** 'I drink', names such as **Сийка** /'sijka/ and others (for more examples see Danchev 1979/1982).

Once Bulgarian learners of English have become aware of the necessity to render vowel quantity in English, they often overdo it by producing extra-long vowels, which again marks them as un-English. Thus, for example, Despotova reports that the average duration of the long vowels of English as pronounced by Bulgarian informants is by 50 to 75 percent longer than when the same vowels are pronounced by native speakers (for details cf. Despotova 1978:33).

Ultimately some Bulgarian learners of English do succeed in acquiring the correct pronunciation of the short and long vowels. A certain amount of variability, conditioned by speech tempo, neighbouring sounds, physical and emotional state of the speaker, as well as some additional factors, nevertheless continues to affect the pronunciation of these vowels. Advanced Bulgarian learners of English will cope more or less successfully with the long vowels (despite occasional overlengthening), but the pronunciation of the short vowels often remains un-English and becomes fossilized. Whereas during the initial acquisition stages the main problem is posed by the long vowels, during the more advanced stages it is the correct production of the short vowels that turns out to be more difficult.

1.2. Vowel Quality

Quantity apart, the articulation of English short /i/, /e/ and /u/ does not seem to create any particular problems. Difficulties of one kind or another arise with /æ/, /ʌ/ and up to a point with /ɔ/.

1.3. /æ/

The most frequent deviations are with the /æ/ vowel. Predictably, given its acoustic parameters as well as the evidence from its adaptation (in loanwords) in other languages (cf., e. g., Filipović 1982; Viereck & Bald 1986), the prevailing cross-language identification (Weinreich 1953) is with /e/ and less frequently with /a/. Being so widespread, the /e/ can be regarded as the unmarked counterpart of the more marked (in terms of the criteria in Mayerthaler 1982 and Lass 1984) /æ/ vowel.

The acoustic data are as follows:

VOWELS	AUTHORS	FORMANT 1	FORMANT 2	FORMANT 3
E. /æ/	Denes & Pinson 1973	660—840 ^a	1720—2050	2410—2850
	Wells 1962	748	1746	2460
	Delattre 1965	750	1700	—
	Henton 1982	713	1615	2491

B. /e/	Stoikov 1966	475	1675	2300
	Tilkov 1968	411	1665	2319
	Lehiste & Popov 1970	500	1810	2380
B. /a/	Kurlova 1985	491	2193	2898
	Stoikov 1966	700	1200	2200
	Tilkov 1968	513	1083	2134
	Lehiste & Popov 1970	770	1455	2260
	Kurlova 1985	743	1210	2719

The above data reveal certain areas of contiguity and overlapping. The English /æ/ vowel is closer to Bulgarian /a/ in formant 1 and closer to Bulgarian /e/ in formant 2, the latter being perceptually more relevant.

These data explain the frequent confusion of /æ/ and /e/ reflected in spelling errors such as *theŕ, gled* (Moskovska 1983), *merried*, *sandwiches* (although *сандвич* with **a** is a well-known English loanword in Bulgarian) instead of *that, glad, married, sandwiches* and *frands, dadening, rander, bravery^s, halp, hasitate* instead of *friends, deadening, render, brevity, help, hesitate*.

There is an alternative adaptation. Learners with an Eastern Bulgarian dialectal background tend to perceive and produce /æ/ as a falling diphthong — /ja/. Although relatively rarer, this adaptation is reflected in the Bulgarian spelling (and pronunciation) of some English loanwords and names, e. g. in *слянк* /sljank/ 'slang' (there are also variants with /e/ and /a/), *слябинг* /'sljabink/ 'slabbing' (metallurgy), *Блякпул* /'bljakpul/ 'Blackpool' а. о. (cf. Danchev 1979/1982). Though rarer in cross-language terms, this kind of analytical adaptation is attested in a couple of English loanwords in Russian, e. g. *сляб* /sljap/ 'slab' and *слябинг* 'slabbing', in some English creoles, e. g. in *кван* /kjan/ 'can' (Tinelli 1981, Wells 1973), as well as in some varieties of Indian English, e. g. in *квар* /kjar/ 'cap' (Schuchardt 1980). This particular adaptation type is evidently due to the palatal articulation of the preceding consonant. The fact that what we have here has been referred to as a 'long component' by Z. Harris (1944) or as a 'prosody' in terms of Firthian phonology is borne out by the fact that the /ja/ adaptation never occurs in initial position (without a preceding consonant) in BEIL examples or in English loanwords in Bulgarian. It should be noted that this type of crosslanguage adaptation is fairly common with other highly marked vowels such as /ū/ and /ö/, which are frequently perceived and produced as /ju/ and /jo/ by speakers of various languages (for details cf. Danchev 1985a).

The /e/ adaptation emerges as the most 'natural' and therefore most convenient one, at first sight at least. This is why, consciously or unconsciously, many Bulgarian teachers of English accept it. Such a solution would perhaps be practical if it were not for the existence in English of minimal pairs in which /æ/ is opposed to /e/. Whereas in ordinary words (e. g. *band* — *bend*) the context will nearly always disambiguate the meaning of the utterance, it proves less helpful in the case of proper nouns, which form scores of such

pairs in English: Addison — Edison, Radford — Redford, Stratford — Stretford (for more examples cf. Danchev 1979/1982). If the /e/ adaptation is accepted this would lead to the coalescence in Bulgarian of names that are distinct in English. To put it another way, although /e/ seems adequate in the light of natural adaptation processes, it turns out to be rather inadequate from an informational point of view. Therefore Bulgarian learners are advised to try for a more open variant of /æ/, closer to /a/ even than to /e/. Moreover, such a pronunciation would be in line with the trend of change in Modern British English, observed and described by a number of authors (e. g. Samuels 1972, Wakelin 1977, Wells 1982, Gimson 1984).

1.4. /ʌ/

As regards the British English /ʌ/ vowel, the spontaneous reaction of Bulgarian learners is to identify it with the Bulgarian accented /ə/ (spelled ъ) or а.

The English /ʌ/ and its Bulgarian adaptations have the following acoustic characteristics:

VOWELS	AUTHORS	FORMANT 1	FORMANT 2	FORMANT 3
Brit. E. /ʌ/	Wells 1962	722	1236	2537
	Henton 1982	645	1200	2519
	Delattre 1965	600	1200	—
Am.E./ə/	Denes & Pinson 1973	640—760	1190—1400	2390—2780
B. /ə/	Tilkov 1968	365	1132	2214
	Stoikov 1966	350	1200	2475
	Kurlova 1985	446	1423	2673
	Lehiste & Popov 1970	495	1515	2380
B. /a/	cf. the data in § 1.3.			

The acoustic data show that the English /ʌ/ is close both to Bulgarian /ə/, and /a/, but with the relevant formant 2 showing more proximity to /ə/.

The above measurements explain the not infrequent hesitation between /ə/ and /a/ in Bulgarian, reflected in spelling errors such as brather, mather, dasted (out of ten students two wrote dasted, while the rest spelled it correctly — dusted), hasband, san. In certain cases variability is displayed by the same informant. In some examples there is confusion between /ə/ and /æ/, e. g. in jucket, truck (Moskovska 1983), jack (with final devoicing — cf. § 3.6) instead of jacket, truck, jug. When speaking of deviation (as 'error' would be too strong a term here) in such cases one obviously has in mind R. P. English (or General British), as for American and some non-R. P. varieties of British English this kind of identification is fully acceptable, of course.

The dual perception model of /ʌ/ as /ə/ (mostly) and /a/ (less frequently) is reflected in a number of loanwords. The /ə/ vowel occurs, e. g., in loan-

words such as блъф/ bləf/ 'bluff', тъч /тэч/ 'touch line' (football), ръгби /rəgbi/'rugby' and in numerous proper nouns, e. g. Дъблин /'dəblin/, 'Dublin', Гъливер /'gəliver/ 'Gulliver', Съмърсет /'səmərset/ 'Somerset'. The /a/ adaptation is seen in loanwords such as акваланг /akva'lank/ 'aqualung' and пикап /pi'kap/ 'pick up truck' and occasionally in proper names. The dominant pattern undoubtedly is with /ə/, some of the /a/ instances possibly being due to Russian mediation.

In certain cases there occur also spelling pronunciations such as /front/ 'front' and /'noθɪnk/ 'nothing'. Pronunciations of u as /u/ are only sporadic.

Since both the acoustic and perceptual data reveal /ə/ as the dominant functional equivalent of the English /ʌ/ vowel in Bulgarian, this identification can be regarded as an acceptable feature of the Bulgarian English interlanguages. On the other hand, there exists a somewhat more pedantic approach among some teachers of English in this country and abroad who lay store by /ʌ/, thus aiming towards a more heavily marked type of British English pronunciation. However, the more realistic attitude seems to leave the natural impulse of Bulgarian learners of English of identifying English /ʌ/ with Bulgarian /ə/ unchecked. This recommendation should go with the proviso that the natural interlingual identification is acceptable for learners with utilitarian motivation, whereas learners with integrative motivation ought to be made aware of the possible variants and of their sociolinguistic and stylistic implications. The fact that foreigners are often advised by English instructors to approximate English /ʌ/ to /a/ is most likely due to the fact that in most learner native languages there do not exist similar stressed central vowels, the nearest possible comparison therefore being with /a/, which occurs in practically all languages. In respect of Bulgarian learners of English, however, such a recommendation should be applied with caution. Although the /ʌ/-like pronunciation apparently has higher prestige, obviously being regarded by some Bulgarian teachers of English as a true hallmark of Englishness, pedantic adherence to such a pronunciation may produce occasional odd sociolinguistic effects, particularly against the background of an only partially acquired R. P. accent, as is most often the case.

1.5. /ɔ/

The British English /ɔ/ vowel is identified easily with the Bulgarian /o/ and thus usually receives a somewhat closer pronunciation in the Bulgarian English interlanguages.

The acoustic characteristics of English /ɔ/ and Bulgarian /o/ are as follows:

VOWEL	AUTHOR	FORMANT 1	FORMANT 2	FORMANT 3
Brit. E. /ɔ/	Wells 1962	599	891	2605
	Delattre 1965	550	900	—
	Henton 1982	551	860	2530
B. /o/	Stoikov 1966	575	950	2625
	Tilkov 1968	367	794	2194
	Lehiste & Popov 1970	495	990	2270

The acoustic data again diverge least in their formant 2 characteristics. In any case, since this kind of lip unrounding is phonologically irrelevant it can probably be regarded as a less essential feature of the Bulgarian English interlanguages that have a more utilitarian orientation. It goes without saying that while such a pronunciation can perhaps be accepted for a British English oriented interlanguage, it is evidently much less acceptable if American English is the target language. The difficulty for Bulgarian learners in this case consists mainly in overcoming the influence of the spelling (it may be noted here that Bulgarian learners of Russian encounter practically the same difficulty).

1.6. Diphthongs.

Since all long vowels may assume a more or less diphthongal pronunciation, it appears necessary to define the basic feature whereby long vowels will be distinguished from diphthongs. In this case it has been accepted that a diphthong is any combination of vowel sounds which is heterogeneous, that is, where the difference between the onset and the end of the phonetic movement amounts to one or more basic sound types^o (stressed /ə/ will also be treated as a basic sound type here). As relatively homogeneous I regard vowels which despite the not infrequent diphthongal nature of their articulation, e. g. /ij/ and /uw/, still remain within the zone of the same basic sound type, in these cases of /i/ and /u/.

The data in the corpus indicate that the acquisition of the diphthongs creates on the whole fewer difficulties than the acquisition of the homogeneous long vowels. There occur two main types of errors — monophthongization and overgeneralization. As in other interlanguages (cf. e. g. the evidence in Vidović 1972, Wode 1980), monophthongization occurs most frequently with ([ei],[ej]/ and /[ou],[əu]/ respectively to /e/ and /o/.

1.7. /[ei],[ej]/

Although such a phonetic diphthong occurs in Bulgarian too, e. g. in words such as **пейка** /'pejka/ 'bench' and **пей/пей**, **imp. of пeя** 'sing', there exists copious evidence showing that the palatal off-glide of this English diphthong is often not perceived by Bulgarian native speakers.

The tendency towards monophthongization can be seen in various spelling errors such as **lek, mek, tek**, a. o. instead of **lake, make, take**. The written form is obviously a factor too, because monophthongal pronunciations are much rarer with words such as **day, rain, and may**, where the diphthongal pronunciation is suggested by the spelling.

The same kind of simplification is plentifully attested in English based creoles (cf. e. g. Todd 1984) and in various English loanwords in Bulgarian such as **стек** *stek*/'steak', **скрепер** /'skreper/ 'scraper', **тренинг** /'trenink/ 'training' and others. It should be noted that the diphthong is preserved more often in monosyllabic than in polysyllabic words, even in closed syllables, which are untypical of Bulgarian. Thus, for example, the diphthong is preserved in **реѝм** /gejm/ 'game', **сеѝф** /sejf/ 'safe deposit', **шеѝк** /šejk/ 'shake'.

The preservation of the diphthong in such positions is probably due to an unconscious desire to preserve the phonetic substance and identity of the word, but we shall return to similar examples further on. Doublet forms exist with **кеѝк** /kejk/ — **кекс** /keks/ 'cake' (the second form is plural in origin but is used as singular) and **леѝди** /'lejdi/ — **леди** /'ledi/ 'lady', the diphthongal variants apparently gaining ground in recent years. The same trend can be observed in English proper names, transcribed in Bulgarian (for examples cf. Danchev 1979/1982).

It should be noted that monophthongization to /e/ is characteristic mainly of beginners and some intermediate students. This feature therefore does not tend towards fossilization and is susceptible to corrective work. Overgeneralization is frequent in the pronunciation of 'national' with a diphthong on the analogy of 'nation'.

1.8. /[əu], [ou]/⁷

The spontaneous Bulgarian identification of this English diphthong undoubtedly is with /o/, which leads to the neutralization of oppositions such as **cod** — **code**, **cot** — **coat**, **hop** — **hope**, **rod** — **road**, **John** — **Joan** in the interlanguages of most beginners, many intermediate and some advanced students.

The monophthongal pronunciation of /ou/ as /o/ can also be seen in English based creoles (cf., e. g., Todd 1984) and in a certain number of English loanwords in Bulgarian such as **болт** /bolt/ 'bolt', **гол** /gol/ 'goal' (in sports), **пони** /poni/ 'pony' a. o., and the same kind of simplification strategy is applied in various English proper names that are frequently transcribed in Bulgarian, e. g., **Оклахома** /okla'xoma/ 'Oklahoma', etc. (for further examples cf. Danchev 1979/1982). On the other hand, in more recent borrowings such as **ландроувер** /landrouver/ 'landrover' (the car) the diphthong tends to be preserved. This is apparently due to the increasing numbers of Bulgarians with a knowledge of English and a concomitant desire to display it.

1.9. Centring Diphthongs.

The monophthongization trend can also be observed in the centring diphthongs of English, of which we shall consider only /eə/ (care) and /iə/ (here), as /uə/ and /əə/ alternate with monophthongal variants in English too (for a recent discussion of the teaching inferences of this situation cf. Preston 1986).

Beginners are apt to make spelling (and pronunciation) errors such as **perents** and **fer** instead of **parents** and **fair** and it may be noted that this happens even in the name **Bulgerian**, the correct English spelling of which (with **a**) coincides with the original Bulgarian spelling. In loanwords there is considerable fluctuation between, for example, **софтуер** /softwer/ and **хардуер** /hardwer/ on the one hand, and the full diphthongal forms **софтуеър** /soft weər/ 'soft ware' and **хардуеър** /hardweər/ on the other.

Similar fluctuations occur with the Bulgarian rendering of /iə/, e. g., in spelling errors such as **bir** and **hir** (beginners) instead of **beer** and **here**, and

many more examples are available in the large corpus of English names transcribed into Bulgarian.

As is the case with the remaining diphthongs, the diphthongal pronunciation is more indispensable in monosyllabic words where it provides sufficient phonetic substance needed for the distinction of such words from similar monosyllabic words with monophthongs. Similar difficulties are encountered by learners of English with native languages other than Bulgarian (e. g. Czech — cf. Mach 1972:104).

1.10. Other Diphthongs

As regards the other falling diphthongs of English — /[au], [aw]/, /[ai], [aj]/ and /[oi], [oj]/ — no particularly noteworthy errors occur in their production by Bulgarian learners. It may be noted though that whereas /aj/ and /oj/ occur in Bulgarian too (only in open syllables), the /aw/ diphthong does not (except in some dialectal forms such as наука /'nauka/ compared to the standard /na'uka/ 'science'). All the same /aw/ is easily accepted both in learner interlanguages and in various words borrowed from English and other languages, e. g., аут /awt/ (in sports), нокаут /'nokawt/ 'knockout', аудитория /awdi'torija/ 'auditorium', сауна /'sawna/ 'sauna'.

The evidence reveals that learners perceive and produce more easily the diphthongs in which the difference between the onset and off-glide amounts to more than one basic sound type. To put it another way, those are diphthongs in which the basic vowels of the onset and the off-glide are not contiguous. Such diphthongs prove perceptually more salient than those of the /ej/ and /ou/ type.

The syllabic position (open or closed syllable) apparently does not affect the difficulty or ease of acquiring the diphthongs of English, despite the fact that insofar as there are diphthongs in Bulgarian they occur only in open syllables. As we have already seen, the same holds true for loanwords such as реџм 'game' and аут 'out', the acceptance of which in the Bulgarian language can be said to amount to a marginal phonological innovation.

Insofar as any problems occur with rising diphthongs, they stem rather from the unfamiliar nature of the semivowel /w/ and the absence of /je/ and /je/ sequences in Standard Bulgarian, rather than from the diphthongal type in general. This is why they will be discussed in one of the following sections (cf. § 2).

1.11. Expressive/affective Use of Diphthongs.

The developments described so far both in learner interlanguages and in loanwords are more or less predictable and similar processes in interlanguages based on native languages other than Bulgarian have indeed been reported by a number of authors (cf. the references). Therefore, with the exception perhaps of the occurrence of falling diphthongs in closed syllables, there is nothing very striking in the evidence shown and discussed so far.

What is somewhat unexpected, however, at first sight at least, is the emergence of some diphthongs in various interlanguage forms evidently favoured

by Bulgarian learners of English. Since I have already described this phenomenon in detail elsewhere (cf. Danchev 1985b), I shall provide only a brief outline here. The following data are worth considering.

One can begin with the anglicized adaptations of Bulgarian names in learner interlanguages. It has been noticed that Bulgarian learners of English readily insert diphthongs into the jocular classroom English adaptations of their Bulgarian first names. Various students — at secondary, high-school and university level, as well as adults on intensive language courses — can often be heard pronouncing their Bulgarian names with diphthongs instead of monophthongs, that is, /'sejʃo/, /spejs/ (note also the closed syllable), /'majra/, /'sajmən/ instead of the normal /'saʃo/ Сашо /spas/ Спас, /'mira/ Мира, /sime'on/ Симеон.

Further evidence comes from some varieties of Bulgarian slang. Under the influence of English diphthongs have been introduced in the jocular slang forms of some Bulgarian toponyms, e. g.:

Normal forms:

Каспичан /'kaspīčan/
Несебър /ne'sebər/
Нови хан /'novi xan/
Стара Загора /'stara za'gora/

Slang forms:

Къспейчън /'kəspejʃən/
Нюсейбър /'nju'sejbər/
Ню хейн /nju xejn/
Олд Зейгър /old 'zejgər/

and similar developments have also been registered in family names, e. g. Джейков /'dzejkəf/ instead of Дяков /'djakof/, а. о. (for more examples see Karastoicheva 1980; Danchev 1985b). These phenomena are in line, of course, with the diphthongizations applied by Bulgarian Learners to their own names. Interestingly, this process has also affected several common nouns in which one witnesses the curious combination of a Bulgarian stem with an English derivational morpheme, i. e., — **ation**, which is again marked by the /ej/ diphthong, e. g. положение /polo'ženie/ 'situation' + — **ation** = положейшън /polo'žejʃən/, а. о. (see the above mentioned references).

In order to acquire additional data a simple experiment was conducted. A large number of informants — 168 adult learners on intensive language courses — were asked to indicate the four names they liked best out of two ten item lists of English male and female names.⁹ Of the male names the respondents ranked first **Michael, Allan, David** and the three female names that came out on top were **Jane, Kate, Liza**. It is interesting to note that five out of those six names are 'diphthongal', so to speak. The first names in each group — **Michael and Jane** — both 'diphthongal', emerged far ahead of all the remaining names (for details cf. Danchev 1985b). The case with Jane is of particular interest, because the diphthong occurs in a closed syllable which, as has already been pointed out, is untypical of Bulgarian. Besides, the affricate /dʒ/ in initial position is also somewhat peripheral in Bulgarian as it occurs only in onomatopaeic words and in borrowings from other languages.

This consonant therefore seems to have retained a certain affective force. From an expressive point of view the optimal combination would therefore be precisely the one we get in **Jane**.

The appearance of diphthongs in somewhat unusual positions and/or with increased frequency in the various Bulgarian English interlanguages can be accounted for as an (un)conscious elaboration, due to a specific type of expressive overgeneralization. This evidently ties in with Slobin's so called 'fourth charge' to language — "be expressive" (Slobin 1977:186). The presence of numerous diphthongs is correctly perceived by native speakers of Bulgarian as a typological vocalic feature of the English language and is therefore exploited in slang and various expressive ad hoc creations.

These developments are typical mainly of the beginner stage and run counter or sometimes parallel to the initial simplification of diphthongs (and other elements), due to L1 transfer and generally to various simplification strategies.

Evidence of this type supports claim that to the wellknown five interlanguage processes, formulated by Selinker (1972), a sixth one — an affective/expressive component — can be added (for details cf. Danchev 1985b). More data on what learners 'like' and 'dislike' on all levels of the target language will undoubtedly provide new insights into language acquisition processes and the overall structure of IL systems.

2. Semi-vowels

2.1. /j/

The same semi-vowel occurs in Bulgarian, but initially only before /a/, /o/ and /u/: in final position there are no constraints on its distribution. Due to native language transfer Bulgarian learners of English tend to omit /j/ in front of /e/ and /i/, especially during the beginner stages. Examples are /'esterdej/, /'ellou/, /iə/ instead of the correct forms /jestədej/ 'yesterday', /'jelou/ 'yellow', /jiə:/ 'year'. By means of corrective work this error type can be overcome relatively easily. This applies especially to the /je/ sequence, which is widespread in the Eastern Bulgarian dialects. Rather than avoidance, in the case of the /jʌ/ sequence (as in 'young') Bulgarian learners tend to substitute /ja/, as this sequence (spelled я) is quite frequent in Bulgarian in all positions.

2.2. /w/

More difficulties arise with /w/. This semi-vowel does not occur in standard Bulgarian and learners apply the following multiple acquisition strategies:

- (1) **Avoidance**, which results in pronunciations such as /ud/ 'wood', 'would', /ulf/ 'wolf', /'umən/ 'woman'. In the Bulgarian public usage of rendering English names this is reflected in spellings such as Уд 'Wood' and Улф 'Woolfe' (for more details and examples cf. Danchev 1979/1982).
- (2) **Substitution** with /u/, which leads to the emergence of an additional syllable in words such as weekend' — /u'ikend/ 'and William' — /u'iljam/. It may be noted that in more popular words such as уиски 'whiskey' the

correct pronunciation prevails, even on the part of people who have not studied English.

- (3) **Transformation** of the rising diphthong into a falling one, thus coalescing with an existing Bulgarian diphthong. This is illustrated by pronunciations such as /'ujkend/ 'weekend' and /'ujlsən/ 'Wilson' and is reflected in the Bulgarian forms of these words: уйкенд and Уйлсън in which the yod is marked by a diacritic sign.
- (4) **Substitution of /v/ for /w/**, which is typical mostly of learners who have studied some German and/or French. In public usage this strategy is reflected in quite a few loanwords, e. g. ват /vat/ 'watt' and квакер /'kvaker/ 'quaker'. More recent loanwords tend to have /w/, spelled у (/u/), e. g. твист /twist/ 'twist', Уотъргейт /'wotərgejt/ 'Watergate', а. о.

Whereas during the beginner stage some learners tend to substitute /v/ for /w/, others substitute hypercorrectly /w/ for /v/, e. g. in /'owə/ 'over'. The same development in the IL of Polish learners of English, e. g. in /'wojs/ 'voice' and /'wəri/ 'very' has been referred to as "An intriguing error to which several interpretations could be given, none of which seems convincing" (Gussmann 1984:32).

Despite the multiple strategies described above, intermediate and advanced Bulgarian learners of English gradually manage to handle this semi-vowel correctly and incorrect fossilization is rare, provided, of course, that enough corrective work has been done.

3. Consonants

On the whole the consonants of English pose fewer problems to Bulgarian learners than the vowels. This is due mainly to the fact that the consonantal systems of the two languages differ less than their vocalic systems. The main differences can be reduced to:

- (1) The existence in English of certain consonants such as, e. g., /θ/ and /ð/ that do not exist in Bulgarian.
- (2) Differing distribution of roughly identical consonants.
- (3) Differing allophones of the same consonants.

When saying that a given consonant is the 'same' in two languages, this is evidently only an approximation, implied by the use of the same phonetic symbols for what, in fact, are nearly always different sounds.

The acquisition strategies applied by Bulgarian learners in order to cope with the above mentioned difficulties can be subsumed to:

- (1) Incorrect substitutions, (2) overgeneralization and (3) simplification.

3.1. /θ/ and /ð/

The English interdental spirants /θ/ and /ð/ are usually replaced by /t/ and /d/, less frequently by /f/ and /v/ and only rarely by /s/ and /z/. The dominant functional equivalents /t/ and /d/ are fairly frequent among beginners and numerous examples can be adduced such as /tink/ 'think', /to(:)t/ 'thought', /'tenkju(:)/ 'thank you' in oral production and spelling errors such as weader

(reported in Moskovska 1983) and *moder* instead of *weather* and *mother*. The dominant functional equivalent is also reflected in the accepted adaptation of English loanwords in Bulgarian, e. g. *трилер* /'triler/ 'thriller' and in names such as *Хедър* 'Heather'.

The confusion of /θ/ with /f/ is seen in spelling errors such as *routh* and *fick* instead of *rough* and *thick* (the latter example is from Moskovska 1983). This kind of substitution, paralleled in Cockney, is occasionally also heard orally, e. g. in /fink/ instead of /θink/ 'think'. The /s/ and /z/ substitutions are rather exceptional.

All the substitutions reviewed above can be subsumed under markedness reduction, i. e., to simplification strategies resulting in underdifferentiation. Since the interdental spirants, especially the voiced /ð/ (due to its occurrence in form words), are relatively frequent in English (/ð/ ranks 6th in British English and 10th in American English consonantal frequency lists — cf. Fry 1947, Roberts 1965), their correct pronunciation ought to be insisted upon. Practical experience has shown that through corrective work it is possible to overcome these initial difficulties and mispronunciations of these consonants are rare among intermediate and advanced students.

3.2. /ŋ/

As in many other languages, the velar nasal /ŋ/ occurs in Bulgarian as an allophone of the normal /n/ before /k/ and /g/, e. g. in *банка* /'ban̩ka/ 'bank' and *Ангел* /'aŋgel/ 'Angel', but not as a phoneme in its own right. Therefore the /n/ — /ŋ/ opposition of English (e. g. in *sin* — *sing*) tends to be distorted or neutralized in the Bulgarian English interlanguages. Bulgarian learners usually apply the following strategies:

- (1) **Substitution with /n/**, which is a clear case of simplification. Although existing in English dialects, this kind of pronunciation ought to be discouraged on account of the sociolinguistic connotations it carries.
- (2) **Decomposition into /ng, nk (finally)/**. This is the most widely applied strategy, even by advanced learners, and tends towards fossilization. This is probably strengthened by the presence in Bulgarian of numerous English loanwords ending in — *инг* /ink/, e. g., *дансинг* /'dansink/ 'dancing floor' and *паркинг* /'parkink/ 'car park/parking lot', a. o. Spelling influence has also been suggested (Stamenov 1985), but in any case this type of analytical decomposition strategy is characteristic of interlanguages in general and is often seen in situations of contact on all language levels (for examples and details on the phonological level see Danchev 1985). The decomposition of English velar /ŋ/ to /ng/ or /nk/ occurs also in the Polish (cf. Rubach 1984:40), Romanian (cf. Parlog 1973, Ulivi 1973), Czech (Mach 1971), Hungarian (Nemser & Juhasz 1964), Serbo-Croat (cf. Vidović 1972), and other English-oriented interlanguages. In fact, this tendency is fairly universal. The elimination of the velar /ŋ/ in one way or another is, of course, predictable on the ground of its being a more highly

marked consonant and it is no accident that it has been described as a peripheral phoneme in English (Vachek 1964).

- (3) **Deletion**. Spelling errors such as *shiny* and *try to* instead of *shining* and *trying to* suggest that Bulgarian learners of English, especially beginners, occasionally simply do not hear the velar nasal consonant.

Teachers must bear in mind the fact that the correct pronunciation of /ŋ/ requires a lot of work. The alternative teaching strategy, perhaps acceptable in respect of non-professionally motivated learners, would be to regard /ng, nk/ as passable substitutes for /ŋ/.

3.3. /l/

The English /l/ being strongly alveolar, it differs from the corresponding Bulgarian consonant. A two-tier approach can be adopted in this case as well. In order to avoid sounding 'foreign', Bulgarian learners with professional motivation should aim at the correct pronunciation of both the clear and dark allophones of English /l/ bearing in mind the fact that it is the latter allophone that requires a lot of practice. On the other hand, it has been noticed that some learners acquire the correct pronunciation of the various allophones of /l/ without special tutoring. Be that as it may, since, even when these sounds have not become part of the learners' interlanguages, their incorrect articulation usually does not affect communication in any decisive way, they can be left uncorrected in learners with more instrumental motivation.

3.4. /r/

As pointed out by Mincoff, "of all the consonants it is the English *r* that differs most strongly from the Bulgarian" (Mincoff 1973:33). It may be added here that there are many variants of /r/ among English native speakers and none of them is close to the Bulgarian rolled lingual /r/ except perhaps Scottish /r/. Therefore special care must be taken with this consonant, especially with learners who want to become teachers and/or interpreters (professional/integrative motivation), by applying all the usual corrective techniques. The vast remaining group of learners with instrumental motivation are often left to their own devices, as trying to correct their mispronunciation of /r/ often turns out to be a losing battle.

3.5. /h/

What has been said about /r/ is more or less valid of /h/ as well. Whereas teachers working with university students who are to become teachers and interpreters will have to make sure that they do not carry over the Bulgarian guttural spirant /x/ into the pronunciation of English words, a more lenient approach is practically unavoidable in all remaining cases.

3.6. /p/, /t/, /k/

It is often claimed that aspiration is the most important feature of the English voiceless plosives and that although it is not phonologically distinctive, it is so important for the correct phonetic realization of voiceless English stops that it requires special attention. This obviously applies to learners with professional/integrative motivation. As regards all other kinds of Bulgarian

learners of English, these consonants are usually pronounced without aspiration. The practical experience of teachers suggests that it is hardly worthwhile insisting on the acquisition of aspiration. Learners usually resist (unconsciously, of course) all attempts at correction and go on pronouncing /p/, /t/, /k/ as they do in their L1, that is, Bulgarian. If made specially aware of aspiration they are likely to overdo it, which leads to artificial and even ridiculous effects. This is why, since that feature does not have phonological relevance, it can be given less attention in corrective work. The risk that English native speakers may confuse the voiceless and voiced stops as pronounced by Bulgarians is somewhat exaggerated. Though possible, such misunderstandings are practically always obviated by the context.

3.7. Final Voicing.

The contrast between final voicing in English and its lack in Bulgarian requires a somewhat more detailed discussion. The final devoicing of voiced consonants in Bulgarian, typical of many other languages too, is constantly carried over into learners' interlanguages and is the cause of frequent spelling errors such as **back**, **five**, **glad**, **instead**, **right**, **tight** instead of **bag**, **five**, **glad**, **instead**, **ride**, **tied** and **dring**, **hid**, **hod** (some of these examples are also mentioned in Moskovska 1983) instead of **drink**, **hit**, **hot**. Sometimes there is variation within the same IL idiolect, as, for example, in **student/studend** (despite the fact that this word occurs in Bulgarian with final /t/) and **husband/husbandant**.

More than in the case of other consonants there arises the question of what approach to adopt in this case. Is it justified to spend a lot of effort and time insisting on a pronunciation, which at best will turn out to be just a temporary achievement? Besides, according to some observations final devoicing of consonants may occur in English too, depending on the quality of the initial sound of the following word and the nature of the final consonant or consonant cluster itself (cf. e. g. Barber 1964, Jones 1967, O'Connor 1973, Haggard 1978).

It has also been noticed that when trying to produce final voicing of English consonants foreign learners are apt to pronounce the so called 'paragogic' schwa /ə/, this resulting in an additional syllable, e. g. in words such as **tag**, **had**, **rob**, pronounced as /'tagə/, /'hadə/, /'rɒbə/ by Chinese (Mandarin) learners of English (Eckman 1981:206—7) and this holds true for some Bulgarian learners as well. Devoicing rather than the emergence of an additional syllable, which can make some words unrecognisable to native speakers, is undoubtedly the lesser of two evils.

Given the fact that the devoicing tendency in English is stronger with final consonant clusters, teachers can adopt a dual approach by insisting on final voicing in the case of single final consonants and accepting devoicing in the case of final consonant clusters. The fact that the presence or absence of final voicing could be linked to the kind of initial sound of the following word suggests different approaches on the levels of language and parole.

As a result of the desire for a correct pronunciation of final consonant voicing Bulgarian learners not infrequently overgeneralize, beginning to voice indiscriminately all final consonants (especially spirants), even those that are voiceless in English. This tendency is particularly marked in the case of final /s/, which is regularly voiced to /z/ in words such as **house** — /hauz/ instead of (haus). The same tendency can also be seen in the public spelling usage of English names such as **Chase**, **Francis**, **Wodehouse** (and in all names ending in — **house**), which are often spelled with **з** /z/ in Bulgarian — **Чейз**, **Франкис**, **У(у)дхауз**, thus wrongly suggesting that they ought to be pronounced with a final voiced consonant in English. In fact, this kind of overgeneralization is quite typical of the Bulgarian English interlanguages.

3.8. Simplification of Consonant Clusters.

The simplification of final consonant clusters, typical of Bulgarian in words such as **турист** /tu'ris / 'tourist' and **тракторист** /traktɔ'ris/ 'tractor driver' is often carried over into the learner interlanguages. Among other things, this can lead to the deletion of important grammatical markers, as e. g. in **change** (Moskovska 1983), **haven** (Yordanova 1985), **I'm divorce**, a. o. instead of **changed**, **haven't**, **divorced**, the omission of plural and possessive markers, etc. This tendency remains as a variable feature long after the beginner stage and given its functional importance it ought to be countered by means of tenacious corrective work.

A predictable alternative strategy for simplifying consonant clusters consists in the introduction of epenthetic vowels between the two (or more) consonants of the cluster and the creation thus of an additional syllable. This strategy is practically universal and is reflected in numerous English loanwords in various languages. This process actually reflects the preference of interlanguages, pidgins and creoles for open syllable structure (cf. Tarone 1980). This is why Bulgarian learners tend to take more easily to American forms such as /'sekrətəri/ 'secretary' with four syllables than to the syncopated British English variant /'sekritri/ consisting of three syllables only. With regard to final consonant clusters it is sometimes better to allow learners to insert a schwa vowel in words such as **little**, **haggle** and **dribble**, because some learners might otherwise add the schwa at the end of the word. This is why schwa marking has been adopted in the phonetic transcription of such words in the "English for Bulgarians" course (Danchev et al 1983).

4. Conclusions

Within the framework of a single paper it is naturally impossible to consider in detail all the relevant points in the segmental phonology of the Bulgarian English interlanguages. In any case, it can be concluded that the BEIL has a number of specific phonetic and phonological features which are due to a variety of causes. The hierarchy of these causes can be presented in the following manner.

4.1. Native Language Transfer.

This is undoubtedly the most powerful factor in the formation of the BE-IL. The following features can be attributed to L1 transfer.

(a) Neutralization of the quantitative oppositions with concomitant shortening of the English long vowels and lengthening of the short ones.

(b) Substitution of /e/ for /æ/, /ə/ for /ʌ/ and of /o/ for /ɔ/. As an additional feature here one may mention the substitution of /ja/ for /æ/ in some Eastern Bulgarian based interlanguages.

(c) Monophthongization of /[ei],[ej]/ and /[ou],[əu]/ to /e/ and /o/.

(d) Substitution of /t/ and /d/ /occasionally /f/ and /v/ and rarely /s/ and /z/) for /θ/ and /ð/.

(e) Simplification of /ŋ/ to /n/ or /ng, nk/.

(f) Underdifferentiation of the various allophones of /l/.

(g) More energetic pronunciation of /r/ and /h/.

(h) Word final devoicing of voiced consonants.

4.2. Overgeneralization

(a) Diphthongal /ej/, /aj/ and /ou/ insertion in some words and positions where they do not occur in English, or creation of new IL forms containing these diphthongs (cf. also § 4.4).

(b) Extra-lengthening of long vowels.

(c) Voicing of /s/ in final position.

4.3. Teaching

This factor actually cuts across the foregoing two. It can affect the correct production of:

(a) English /æ/.

(b) English /θ/ and /ð/.

(c) All the diphthongs.

All the remaining features listed above (under § 4.1) are much more difficult to eradicate and require more specialized corrective work, which is justified only for professional training (e. g. for future teachers and interpreters).

4.4. Affective Component

Although this IL aspect has already been mentioned (cf. § 4.2) it seems important enough to warrant separate status. As has already been pointed out (§ 1.11), the Bulgarian English interlanguages (and other interlanguages probably too) usually also contain an affective component, which may stimulate or slow down the correct acquisition of certain features. In addition to the evidence in § 1.11 it has been noticed, for instance, that Bulgarian learners of English shy away from words beginning with /θ/ and 'like better' words containing various diphthongs.

4.5. Summing-up.

For the remaining components of Selinker's nomenclature it is somewhat more difficult to find illustrating examples in the various Bulgarian English interlanguages.

As has already been pointed out, an affective/expressive component (cf. also

the discussion of Dulay & Burt's "socio-affective filter" and related matters in Krashen 1981:19—39) should be added to Selinker's five factors.

The review of the data indicates that the most decisive role in the formation of the Bulgarian English interlanguages is played by L1 transfer, with overgeneralization in second place. On the other hand, most of the features enumerated above are typical of other interlanguages (with different native languages) as well, which would suggest multiple causation in a number of cases. As more specifically BEIL features at the segmental level one can pinpoint the identification of /æ/ as /ja/ and of /ʌ/ as /ə/. More specific features can be found at the suprasegmental level which, as was pointed out at the beginning, has still not been studied sufficiently.

No strictly longitudinal phonetic and phonological studies of the BEIL having been conducted yet, only some general observations and impressions can be offered here. All the same it is clear enough that whereas certain early BEIL features are likely to disappear, others tend to fossilize relatively early and are very difficult to correct. Thus, for example, the identification of /e/ and /ð/ with /t/ and /d/ or other consonants is typical above all of the early acquisition stages. On the other hand, the perception and production of English /æ/ as /e/ proves rather tenacious and is very difficult and sometimes impossible to eradicate. The only real chance at correction seems to be at a very early stage and requires special presentation strategies. Even more difficult is the acquisition of the velar nasal /ŋ/. The longitudinal development of these and other sounds is marked by variability.

4.6. Teaching Inferences.

There is no doubt that the errors or deviations discussed in this paper are variously acceptable as interlanguage features. Therefore it is very important to work out a differentiated approach to the errors reviewed here. The adoption of such a strategy will save a lot of teaching time and will enable course designers and teachers to invest their efforts and plan their teaching time in a more rational manner.

Before, however, proceeding to determine the acceptability degrees of the various types of errors, it might not be superfluous to repeat once again that different criteria will have to be adopted for the two main types of interlanguages - those of (1) learners with a professional/integrative motivation (future teachers and interpreters) and (2) learners with a more utilitarian orientation, to whom English is above all a means of international communication. Whereas the first type of learners will obviously be expected to conform to more rigid acceptability criteria, more latitude can be tolerated in respect of the latter group of learners, which is also the largest (for a brief overview of opinions on the teaching of pronunciation cf. also Beebe 1984). The following features should be subjected to corrective work in all cases:

(a) The non-distinction of short and long vowels.

(b) The incorrect pronunciation of diphthongs.

(c) The incorrect pronunciation of the interdental spirants /θ/ and /ð/.

Concerning the interlanguages of the second type of learners, less attention can be given to the following features.

- (a) The pronunciation of English /æ/, /ʌ/ and /ɔ/ as /e/, /ə/ and /o/.
- (b) The lack of aspiration in /p/, /t/, /k/.
- (c) Final devoicing of voiced consonants.
- (d) The decomposition of the velar nasal /ŋ/ into /ng/ or /nk/ /word finally/.
- (e) The non-differentiation of dark and light /l/.
- (f) The more energetic articulation of /r/ and /h/.

As a maximum programme it is naturally desirable to aim at the elimination of all the errors indicated above. However, when less time is available teachers must adopt some kind of a realistic minimum programme. Such a compromise might sound rather unorthodox, but it is nevertheless more practical bearing in mind what is actually feasible. Moreover, given the fact that the overall speech production of even very advanced learners will inevitably be marked by a variety of grammatical, lexical and stylistic errors, it does not seem apposite to aim at all the niceties of a polished R. P. pronunciation. From a communicative point of view it might be more effective to stick to a more neutral type of English — British, American or even 'mid-Atlantic'. The latter option was rejected until recently. However, as recent experiments have revealed, it is precisely this type of English that gets the highest acceptability rating by native speakers of English asked to judge the performance of non-native speakers (for details cf. Preston 1986).

The data adduced and discussed in this paper are evidently incomplete and call for further research. Thus, for example, in order to get a fuller picture of the BEIL it will be necessary to investigate also in detail the unstressed vowels, the degrees of variability, speech tempo, sandhi phenomena, rhythm, the degrees of irritability (on the part of native speakers) caused by various error types, and, of course, all the suprasegmental features. It is hoped that, with all its shortcomings, the present paper will stimulate further studies of the BEIL.

NOTES

- 1) This is a revised and expanded English version of a former paper, published in Bulgarian (Danchev 1980/1984). It also includes, in a somewhat revised and expanded form, a paper presented at the Anglistentag in Kiel, 29.IX. — 1.X., 1986 (Danchev forthc.).
- 2) Since the distinction between 'lax' and 'tense' vowels does not always receive the same interpretation (for details cf. Danchev 1978, 1981), I have adhered to the traditional distinction between 'short' and 'long' vowels.
- 3) Though rarer, the identification of English /æ/ with /a/ is to be met with in some languages such as, e.g., French and Japanese. The degree of spelling influence on such cases is, of course, difficult to assess.
- 4) The two figures in Denes & Pinson 1973 refer to male and female speech respectively.

5) Students of English at the University of Sofia were asked once to write an essay on the saying 'brevity is the soul of wit'. Some of the students mistakenly derived 'brevity' from 'brave' and wrote 'bravity'. That phonetic perception error naturally gave an entirely different direction to their essays.

6) The term 'basic sound type' is used here in preference to 'cardinal vowel', which has come into heavy criticism in recent years (cf., e.g., Butcher 1982). As used in the literature (cf., e.g., Axmanova 1966) the notion of 'sound type' is broader than that of 'cardinal vowel' and can be used as an umbrella term for groups of sounds with important common characteristics. Thus, for example, it can be claimed that English short /lax /i/, English long/tense /i:/ and Bulgarian /i/ belong to the same sound type in terms of perception and production.

7) Bulgarian learners of English often find some of the phonetic symbols used in the Jones & Gimson version of EPD somewhat confusing. This is why a slightly modified version of the traditional Jones EPD transcription is used in this paper. Alongside with [əu], [ou] has been retained so as to encompass a broader range of varieties of English. In addition to the /ai/, /ei/ and /ɔi/ notation, the phonetically more precise variants /aj/, /ei/ and /j/, which facilitate the comparison with Bulgarian (cf. also Danchev 1986), have been used too.

8) In this particular case it could also be argued that the students simply replaced a Bulgarian name by its English cognate.

9) The ten English names are: male — **John, Michael, Robert, William, James, Gordon, Allan, Ivor, Thomas, David**; female — **Susan, Kate, Florence, Liza, Ruth, Judy, Jane, Margaret, Myra, Nancy**. The reasons for choosing these particular names are explained in detail in Danchev forthc.