

Jim Hlavač
Monash University
Clayton, Vic., Australia

PHONOLOGICAL INTEGRATION OF ENGLISH TRANSFERS IN CROATIAN: EVIDENCE FROM THE CROATIAN SPEECH OF SECOND-GENERATION CROATIAN-AUSTRALIANS

This paper examines the process of phonological integration (replacement of donor language phonemes with recipient language phonemes) of English-origin forms in the Croatian speech of second-generation informants in Australia. Phonological integration is determined primarily by the phonetic form and secondarily by the graphemic form of the original Australian English item. It is shown that Australian English vowel phonemes not found in Croatian (e.g. select monophthongs, diphthongs, triphthongs) are nearly always replaced by Croatian vowel phonemes which are closest to them in terms of place of articulation, i.e. *partial* or *compromise transphonemisation* in Filipović's (1978) terms. The same applies to consonant phonemes which also undergo *complete* or *partial/compromise transphonemisation*, except for a select group of phonemes, /θ/, /ð/, /w/, /ŋ/, which retain their phonemic form and remain 'untransphonemised'. This leads to instances where within the same item certain phonemes are transphonemised while others remain unchanged. Phonological integration is therefore shown to be a process which is relative rather than absolute. This process, which can be represented as a continuum ranging from donor-language phonemes at one extreme and their equivalent recipient-language phonemes at the other, allows for donor-language phoneme substitution with phonemes which may be situated anywhere along this continuum, i.e. integration itself may be *partial* or *complete*.

'Non-transphonemisation' of /θ/, /ð/, /w/, /ŋ/ is shown to be linguistically and perhaps also sociolinguistically motivated. Linguistically, the articulatory 'distance' between these four phonemes and any Croatian phonemes is perceived to be sufficiently great that transphonemisation ceases to be a felicitous option. Sociolinguistically, non-transphonemisation of these four phonemes may represent a feature typical of linguistic competence which is itself revealing of generational-membership of Speaker. There is, however, much counter-evidence elsewhere in the sample that suggests that linguistic features indicating generational-membership of Speaker are more likely to be expressed through other linguistic phenomena, i.e. code-switching into English.

1.0. Introduction

The use of single words belonging formally to one language while speaking another is perhaps one of the most conspicuous of all language contact phenomena. Importation of words from a donor language to a recipient language is a process which interests non-linguists as well as linguists, while for a great many bilinguals this process is a part of their everyday speech. This paper seeks to examine the process by which the phonological form of English-origin words is altered or adapted to the phonological system of Croatian and to position these findings in relation to previous studies examining Croatian-English language contact (eg. Surdučki 1978; Jutronić-Tihomirović 1985; Filipović 1986, 1990).

In language contact research there is little uniformity of terminology when reference is made to a) the process of an element with language *x* origins being used in language *y* discourse, and b) the result or product of this process. Haugen (1956) defines *interference* as a process, ie. »the overlapping of two languages«, while this process is also partly defined by certain manifestations which are not a product of it, ie. »... overlapping not including the use of »unassimilated loanwords or of unrecognisable 'established loans'« (1956:40). As a term, *interference*, has been employed less by subsequent researchers of language contact and is now largely restricted to literature on language acquisition (See Appel & Muysken, 1987). Clyne (1967) adapts Haugen's and Weinreich's (1953) generalist definition of *interference* by removing references to norm-deviation as a characteristic of it and adopts in preference the term *transference*. *Transference* is defined as the taking on of elements, characteristics and/or rules from another language. The linguistic consequences of *transference*, ie. the various elements, features, manifestations of rules etc. are labelled *transfers* (Clyne 1967:19). The term *transfer* refers only to the example or result of the process and is intended to replace other terms used in the field such as *loanword*, *switch* and particularly *borrowing* all of which may refer to either process or result. As the items under consideration in this paper are lexical elements, I adopt *lexical transfers* here as a defining term. (The term is analogous to *phonological transfers*, *semantic transfers* etc. and other products of *transference*).

Transfers can be subject to *integration*. *Integration* is understood as the presence of phonological, morphological and/or graphemic elements from the recipient language in the form of the item which has the effect of »assimilating« (Haugen 1956:40) or »adapting« (Clyne 1991:264) it to the system(s) of the recipient language. *Integration* is also an important criterium in other studies which employ the terms *borrowing*, *loanword* or *switch*. According to Appel & Muysken (1987:172) the traditional view of distinguishing between *borrowing* and *code-switch* is the presence of integration markers (phonological, morpho-

logical and graphemic). Integration as a distinguishing feature can be problematic in that various degrees or types of integration are possible according to language-specific or Speaker-specific features. At the same time unintegrated forms, purely through absence of formal or overt features indicating integration, may be automatically considered switches of code. For this reason many researchers employ criteria other than or in addition to presence of integration markers.

Macro-linguistic frequency, e.g. occurrence of item three times or more, is taken as the distinguishing feature of *borrowings* as opposed to *code-switches* by Myers-Scotton (1993) while the criteria of recurrence and formal acceptance, relying partly on descriptive/normative sources (ie. dictionaries) are employed by Treffers-Daller (1994) in characterising borrowings. Halmari (1997) regards phonological unassimilation only, as the determining factor which makes a lexical item a code-switch rather than a loanword or borrowing. (The terms *loanword* and *borrowing* are used interchangeably by Halmari (1997) as they are by a number of other researchers, eg. Baetens Beardsmore, 1982; Nortier & Schatz, 1992.) Poplack and her collaborators distinguish a third category, *nonce loans*, which may be integrated (momentarily), as *established borrowings* are, but which appear as single occurrences, a characteristic common to *switches*.

In this paper frequency (micro- or macro-linguistic) of items is not problematised while descriptive sources of Anglicisms in (homeland) Croatian, ie. dictionaries of foreign words, word-lists, research works etc. are consulted where the origin of an item in the Australian context can conceivably be traced to its status as an Anglicism in homeland Croatian. Here, time of entry and type of item are important considerations as time of emigration of informants' parents may predate an item's 'acceptance' in homeland Croatian while a significant proportion of homeland Anglicisms refer to specialist terminology items used in higher register sociolects and/or (usually) urban dialects. (See Filipović 1990:15–27 for context-specific characteristics of homeland Anglicisms and medium-specific samples chosen for collation of Anglicisms.) It is unlikely that the informants of this study would have been exposed to and/or have a knowledge of many such Anglicisms due to the socio-economic and place-of-origin profiles of informants' parents at the time of their emigration.

The focus of this paper is restricted to phonological aspects of English-origin words and does not concern itself with morphological or morphosyntactic aspects which may or may not accompany phonological integration. Phonological integration itself, which is typically thought of as the replacement of phonemes specific to the donor language with those from the recipient language, refers to a process which may be complete or partial. This means that all or only some of the phonemes may be adapted while adaptation may vary from adoption of recipient language phonemes to phonemes whose place

and manner of articulation is somewhere between those of the donor language and those of the recipient language. Phonological integration can be seen as a continuum which may describe a variety of phonological representations.

2.0. Informants and sample

The corpus, on which the data of this paper are based, was collected from recorded interviews conducted in Croatia with 100 Croatian-Australians. Most informants (87) were born in Australia to parents who had migrated to Australia as adults and in both sociological and linguistic terms are considered members of the second generation of an ethnic group and speech community. A smaller number of informants (13) were born in Bosnia-Herzegovina, Croatia or Germany and came to Australia as young children. Their inclusion here as *second-generation* informants is justified by the fact that all arrived in Australia at pre-school age (5 years old) and have had all their education in Australia in English, which is the case with those born in Australia. All informants are speakers of the Štokavski dialect of Croatian and all informants' parents arrived in Australia at the age of 15 or older. The age of informants ranged from 16 to 32. The recorded interviews were carried out from March to September 1996.

While no attempt was made to test proficiency in either language, English was presumed to be the *dominant* language and Croatian the *non-dominant* language of the informants. This presumption was based on several factors: the use of Croatian is usually functionally restricted to the domain of home/family while English is used in most other areas, including communication settings with other second-generation Croatian-Australians; my personal and anecdotal knowledge of the language habits of second-generation members; explicit statements made by some informants during the course of the interviews which indicate restricted communicative competence in Croatian, e. g. *Ne mogu ti to reći na hrvatskom...* ('I can't say that in Croatian...').

Recorded interviews with informants lasted between 20 and 120 minutes. A 15–20 minute segment was chosen from each interview and transcribed. Transcription included approximate length of unfilled pauses, filled pauses, paralinguistic markers such as laughter or coughing but not features such as volume, intonation, word-stress or facial expression. In most cases informants' discourse was transcribed according to Croatian orthography. Those items containing elements which appeared to diverge from the Croatian phonological system are represented by a narrow or phonetic transcription. The interviews consisted of non-spontaneous speech given by informants, usually in response to questions given by the interviewer and prompted by visual stimuli provided, i.e. picture descriptions. Although the interviews were 'loosely structured' there is a degree of comparability across the sample through the rough similarity of questions asked and the same pictures being shown to all informants.

The corpus numbers ca. 148000 tokens and contains 209 phonologically integrated lexical transfers which appear 304 times. This suggests in the first place that phonologically integrated items are statistically very infrequent. Their incidence is compared to that of *unintegrated* forms, of which there are 3362 single word switches and 608 multiple-word switches.

Lexical transfers are found in the speech of 86 of the informants. Distribution within individual transcripts and across the sample of transcripts is not significantly varying.

Data on each informant is given in round brackets after each utterance (see below). The first number refers to informant number, 'M' or 'F' refers to gender while the last number indicates the informant's age. (eg. '73,M,21' signifies: informant number 73, male, 21 years old.)

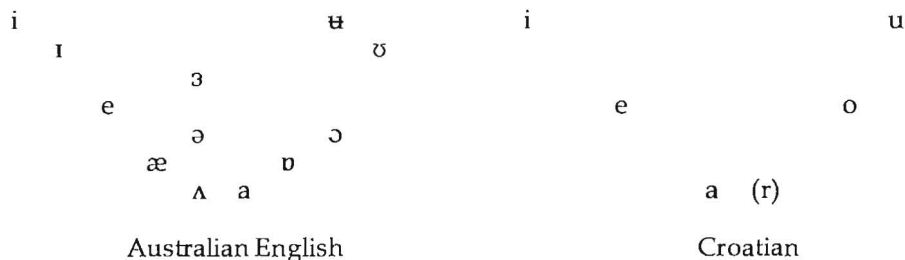
3.0. Phonological integration – Vowels

There are five vowel phonemes, all monophthongs, in Croatian: /i/, /e/, /a/, /o/, /u/. (The phoneme /r/ may also be vocalic. Syllabic /r/, often represented as /r̩/ or /ɹ̩/ is more sonorous and measurably longer than consonantal /r/ and occurs in the following environments: C__C, #__C, C__#.) Croatian has no diphthongs or triphthongs. (Although Barić et al.(1990:409) states that the proto-Slavic reflex *jat* (ě) has in literary Croatian developed into diphthongal [jɛ] or triphthongal [jɛj]. Elsewhere, Brozović (1973) suggests that amongst the vocalic phonemes there is also the facultative phone, [ijē], which has diphthongal qualities and which is represented graphemically as ⟨ije⟩.)

Australian English has 12 monophthongs: /i/, /ɪ/, /e/, /æ/, /ʌ/, /a/, /ʊ/, /ɔ/, /ɒ/, /ɑ/, /ɜ/, /ə/; eight diphthongs: /eɪ/, /aɪ/, /oʊ/, /aʊ/, /ɔɪ/, /ɪə/, /eə/, /ʊə/; and two triphthongs: /aɪə/, aʊə/ (Finegan et al., 1992:40)

In terms of place of articulation, Croatian vowels are not reduced, regardless of word or sentence stress. Croatian vocalic phonemes may occur in any environment (initially, medially, finally, before or after any consonant). In comparison, the distribution of English vocalic phonemes is influenced by word stress. While all can occur in initial or medial position, some never occur in final position.

Figure 1
Vowel Quadrilaterals



As Figure 1 shows, there are few (monophthong) vowel phonemes with exactly the same features shared by both languages – /i/, /e/ and /a/. Where these phonemes occur in the Australian English original no change need take place in the process of phonological integration. Haugen (1956) refers to this process of integration without replacement as “importation” (1956:50), resulting in what Filipović terms “complete transphonemisation” (1986:72). Where non-correspondence of phonemes occurs, replacement or “substitution” (Haugen, 1956:50) with recipient language phonemes takes place. Recipient language phonemes may share either the same place or the same manner of articulation with the donor language phoneme but equivalence of the respective phonemes is not exact, resulting in “partial or compromise transphonemisation” (Filipović 1986:72). Further, Filipović (1986) distinguishes a third process, “free transphonemisation” (1986:72) in which phonemes are replaced not by other phonemes with which they share certain features but by phonemes which may graphemically (approximately) correspond to donor language phonemes, or, alternately, choice of replacement phoneme may be dictated by other, extra-linguistic factors. Lastly, as I suggest below (see 4.0. Consonants), non-correspondence of phonemes may not automatically necessitate *substitution*, rather, (select) phonemes specific to the donor language may remain unreplaced or unchanged, resulting in *importation* of phonemes non-indigenous to the recipient language. Where within the same item containing phonemes specific to the donor language select phonemes are substituted and other select phonemes are imported *partial integration* is the result. As is suggested below, linguistic and/or sociolinguistic factors may be responsible for this.

The following instances of Croatian vowel phonemes replacing English ones are observed. Those examples marked with an asterisk (*) are considered atypical because they bear phones based on the graphemic and not phonetic model of the English original. These graphemically motivated examples also have a significantly lower statistical frequency.

Each transfer is underlined and a phonetic transcription in square brackets is given immediately following. English glosses are ‘free translations’ of the original utterance with the lexical transfer in its original form underlined. A phonetic transcription of the Australian English form of the lexical transfer is given in square brackets as a point of comparison to the phonologically integrated form. Filled pauses usually represented in English orthography as *um*, *ah*, *er*, *mm*, *oh* etc. are represented phonetically without square brackets, ie. Δm , $a:$, $z:$, m^n , $v:$ or $o\delta$ etc. *Unintegrated* elements which appear in the original utterances are represented according to their English spelling, eg. *yeah*, *Ginifer*, *CRC* are represented as *yeah*, *Ginifer*, *CRC*.

i) English monophthong → Croatian monophthong:

- [i] → [i] “Ja sam već razbio zid! Izi [‘izi] prozor!” (51,F,18)
‘I’ve already smashed the wall! (It’ll be) easy [‘izi] to smash) the window!’
- [ɪ] → [i] ... imaju piknik [‘piknik] na bič (46,M,20)
... they’re having a picnic [‘pɪknɪk] at the beach.
- [e] → [e] Yeah, renta [‘renta] je malo veća zato što... (57,M,23)
Yeah, the rent [ɪent] is a little more because...
- [æ] → [e] ... i Beleret [‘beleret] i na one jezere... (42,F,25)
... and Ballarat [‘bæləræt] and to those lakes...
- * [a] ... drama, znaš, akteri [‘akteri] su jako dobro... (8,M,20)
... drama, you know, the actors [‘æktez] are very good...
- [i] → [i] ... kako da ti kažem... na parti [‘parti]. (20,M,18)
... how can I say it... at a party [‘pati, ‘pari]
- [ʌ] → [a] ... kao ljudi njima napravili kao trabel [‘trabel] (97,F,17)
... like people caused them like trouble [‘trʌbet].
- * [u] ... to je možda deset minuta sa busom [‘busom] (80,F,20)
... that’s maybe ten minutes with the bus [bʌs].
- [ɒ] → [o] ... o: yeah, veliki šop [ʃop] sada... ali, ʌm... (52,F,21)
... oh yeah, the big shop [ʃɒp] now... but, um...
- * [a] Kad sam počeo tu u Kwantasu [‘kwantasu]... (53,M,32)
When I started here at Qantas [‘kwɒntəs]...
- [ɔ] → [o] ... u majice, u šorts ... [ʃorts]... 3: dosta ptica. –. (20,M,18)
... in t-shirts, in shorts [ʃɔ:ts]... er... lots of birds...
- [ɒ] → [u] Tako je fulfilovao [ful‘filovao]... sedmi grijeh. (8,M,20)
That’s how he fulfilled [fʊl‘fɪd]... the seventh sin.
- [ʌ] → [u] ... nisam voljela... samo ščupid [‘ʃtʃupid]... (5,F,17)
... I didn’t like it... just stupid [‘stʃɪpɪd]...
- [ɜ] → [e] Jedan prijatelj iz juniversiteta [juniversi‘teta]... (8,M,20)
One friend from university [jʌnə‘vɜsəti]...

ii) Australian English reduced vowel → Croatian full vowel:

- [ə] → [i] ... popravljat, kao... ljepši ofis [‘ofis] ili... (49,M,23)
... fix up, like... a nicer office [‘ɒfɪs] or...
- [e] ... mali biznes [‘biznes] ili nešto tako... (6,F,21)
... a small business [‘bɪznəs] or something like that...

- [a] ... to laboratori [la'boratori] za prehranu... (13,F,26)
... *that laboratory* [lə'bɒrətɪ] *for food produce*...
- [o] ... je bio jako, um... dobro pirijod ['pirijod] u... (8,M,20)
... *it was a really, um... good period* ['piəriəd] *in*...

The graphemic form of the English original appears to indicate which full vowel is allocated, but not always:

- [ə] → [u] ... znaš gdje je Ginifer stejšun ['ste:ʃun], nije... (62,F,19)
... *you know where Ginifer station* ['steɪʃən] *is, it isn't*...
- [a] Yeah, yeah... tradišan [tra'diʃan]... (*smije se*)... (88,F,17)
Yeah, yeah... tradition [trə'diʃən]... (*laughter*)...

iii) Australian English monophthong → Croatian monophthong + semi-vowel [j]

- [i] → *[e]+[j] ... u Sidnej ['sidnej] smo bili... (28,M,31)
... *in Sydney* ['sɪdni] *we were*...

The form of the original, 'Sydney', containing the grapheme 'y' whose phonic quality in English is most often [j], appears to provide the reason for this change. As there are no other cases where AE [i] is not rendered as C [i], I consider this example exceptional.

iv) Australian English diphthong → Croatian monophthong:

- [eɪ] → [e] ... pakujem one kontenere [kon'tenere] i tako... (7,M,21)
... *I pack the containers* [kən'teɪnəz] *and so*...
- [a] ... za školu sam išao u Sant [sant] Albans... (21,M27)
... *for school I went to Saint* [seɪnt] *Albans*...
- [aɪ] → *[i] um... matematična... bijolodži [bi'jɒlədʒi]... (88,F,17)
Um... mathematics... biology [baɪ'jɒlədʒi]...
- [oʊ] → [o] ... imaš šesnaest overa ['overa] za svaki tim. (46,M,20)
... *you've got sixteen overs* ['oʊvəz] *for each team*.
- [iə] → *[e] ... ako je ispod zero ['zero], onda može početi (53,M,32)
... *if it's below zero* ['ziəroʊ], *then it can start to*...
- [eə] → [e] ... ja ću živjet tu u istoj eriji ['eriji]... (4,F,20)
... *I'll live here in the same area* ['eəriə]...
- *[a] smo u arije ['arije] di se samo pije, di se više... (66,M,21)
we're in an area ['eəriə] *where people only drink, where more*...

- v) English diphthong → Croatian monophthong + semi-vowel [j]:
- [eɪ] → [e] + [j] Tu su živjeli... u Futskrej ['futskrej]... (2,F,27)
They lived here... in Footscray ['fɒtskreɪ]...
- [aɪ] → [a] + [j] ... kemiju, z... bajokemistri [bajo'kemistri]... (20,M,18)
... chemistry, er... biochemistry [baɪoʊ'kemɪstri]...
- [e] + [j] ... tamo doli u Lejgon ['lejgon] Strit i isto... (46,M,20)
... down there in Lygon ['laɪɡɒn] Street and also...
- [oɪ] → [o] + [j] ... za džojneri ['dʒojneri] i... razne stvari... (48,M,21)
... for the joinery ['dʒɔɪnəri] and... various things...

vi) English diphthong – 2 Croatian monophthongs

- [aʊ] → [a] + [u] Ja nisam uzela tajm aut [aut] ja nisam htela (60,F,26)
I didn't take time out [aʊt], I didn't want to...

vii) English triphthong → Croatian monophthong [j] + [e]

- [aɪə] → [a] + [j] + [e] Na fakultetu učim sajens ['sajens] učim (20,M,18)
At university I'm studying science ['saɪəns]... I'm studying...

viii) Vowel epenthesis

- [Ø] → [i] Išla sam isto u Sent Alibans, [sent 'alibanz] zove se... (62,F,19)
I also went to Saint Albans [seɪnt 'ɒlbənz], it's called...

The last item appears to be an unusual instance of epenthesis. The form [sent alibanz] was produced twice by the same informant. An apparent motivation for epenthesis may be avoidance of the velarised lateral [ɫ] in post-vocalic position. (It is unclear why the vowel [i] is inserted – frequency of the phonotactic structure /a/ + /l/ + /i/ may provide some explanation.) [ɫ] is not a Croatian phone, although degrees of velarisation of post-vocalic laterals amongst other integrated transfers are detectable. Avoidance of [ɫ] may also explain why the lateral is dropped altogether from the following example:

- ... meni je to orajt, [orajt] ali, um... sve moje prijatelje živu u... na... (3,F,19)
... it's alright [ɔɫraɪt] by me, but, um... all my friends live in... on...

Avoidance of [ɫ] may also partly explain the form of other transfers such as ['aʃiʝonalistɪfko] and [tra'diʃiʝalno]. (See partially integrated transfers, 5.0.)

Another form [sent albanz] without epenthesis for the same referent was

later given in the same interview:

... ona ide u CRC [sijasi], Sent Albans [sent albanz]

... *she goes to CRC (Catholic Regional College), Sent Albans [seint 'ɔ̃bɔnz].*

In other instances, the graphemic form of the English original may explain why apparent vowel insertion has taken place. The following two examples are not as clear-cut because some speakers do not delete vowels. The Macquarie Dictionary (1981:287,1556) gives alternate forms of pronunciation for 'secretary' – [sekrət̪ri, sekrət̪əri] and 'Canberra' – [kænbərə, kænbɹə].

[Ø]/[e] → [e] Tamo je bio predsjednik, potpredsjednik, sekreteri,
['sekreteri]... (66,M,21)

*The president was there, the vice-president, the secretary
['sekrət̪(ə)ri]...*

... isto sam bila u Kamberi ['kamberi]... to je prije... tri,
četiri godine (62,F,19)

... *I've also been to Canberra ['kænb(ə)rə]... that's... three,
four years ago.*

The following instance, however, clearly shows the influence of the graphemic form of the original:

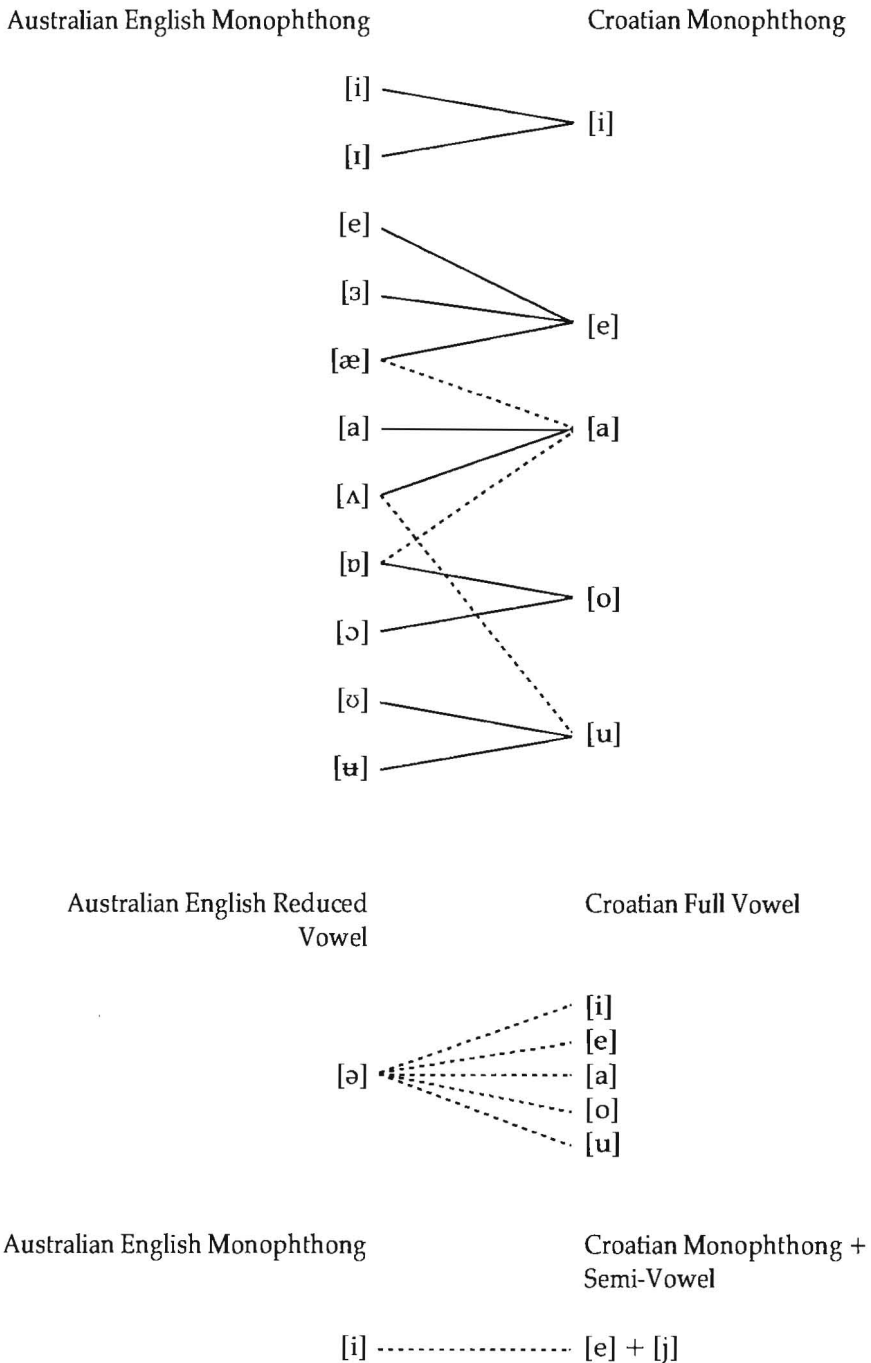
[Ø] → [u] ... ima... puno auto, to je naturalno ['naturalno] kad ima
puno... (85,F,17)

... *there's... a lot of cars, that's natural ['nætʃrəl] when there's a lot
of...*

The differences in place and manner of articulation of phonemes tend to lead to integration of English transferred words according to the following patterns.

An unbroken line between the Australian English phoneme and its Croatian replacement indicates that the connectedness between the two is unmarked, ie. in terms of closeness of place of articulation and statistical frequency an Australian English phoneme is more likely to be replaced with a Croatian phoneme or phonemes. A broken line between the Australian English phoneme and its Croatian equivalent indicates a marked relationship between the two: the choice of Croatian replacement is likely to have been dictated by the graphemic form of the English original and such examples are infrequent.

Figure 2
 Substitution of vowel phones



Australian English Diphthong	Croatian Monophthong
[aɪ]	----- [i]
[eɪ]	----- [a]
[eə]	----- [e]
[ɪə]	----- [e]
[oɔ]	----- [o]

Australian English Diphthong	Croatian Monophthong + Semi-Vowel
[eɪ]	----- [e] + [j]
[aɪ]	----- [a] + [j]
[ɔɪ]	----- [o] + [j]

Australian English Diphthong	Croatian Monophthong + Monophthong
[aɔ]	----- [a] + [u]

Australian English Triphthong	Croatian Monophthong + Semi-Vowel + Monophthong
[aɪə]	----- [a] + [j] + [e]

The phonemic and distributional differences between the vocalic phonemes of the two languages result in the replacement of some Australian English phonemes by Croatian ones. The data suggest that Australian English vocalic segments undergo change of phonetic qualities with the following tendencies:

Monophthongs

- (i) All high front vowels, whether lax or tense, are realised as tense vowels.
- (ii) Upper mid-central rounded [ɜ] becomes upper mid-front unrounded [e].
- (iii) Low front unrounded [æ], occupying a mid-point between the two closest Croatian equivalents, becomes either upper mid-front unrounded [e] or low central unrounded [a].
- (iv) Low central [a] retains its qualities while the other low central vowel, [ʌ], [–length] is also usually realised as [a].
- (v) Mid-back rounded [ɔ] becomes upper mid-back rounded [o].
- (vi) Low back rounded [ʊ] becomes upper mid-back rounded [o] or low central unrounded [a] in certain instances where the graphemic form of the English original is taken as the model in determining vowel phoneme replacement.
- (vii) High tense central rounded [ɥ] and high lax back rounded [ʊ] both become high tense back rounded [u].

The data clearly suggest that monophthongs specific to Australian English are realised in Croatian by monophthongs with the closest similarity in form and which have two or more common features according to place of articulation.

- (viii) Mid-central unrounded [ə] takes on the quality of a full Croatian vowel usually according to its graphemic representation in the English original. [ə] can become [i], [e], [a], [o] or [u].

Diphthongs

- (ix) The diphthong [eɪ] becomes either low central unrounded [a] or upper mid-front unrounded [e] with or without post-positioned semi-vowel [j], regardless of position or environment. As has been suggested by researchers of Australian English, (Durie & Hajek 1994; Clark 1989) the initial vocalic quality of this diphthong is closer to a low front rather than an upper mid-position, and would be better captured as [æɪ]. This then explains why the Croatian realisation of this diphthong is similar to the realisation of the monophthong [æ].
- (x) The diphthong [oʊ], starting from an upper mid-back rounded position moving to a high central rounded position is rendered as [o], according to the place of articulation of the initial vowel quality.
- (xi) The diphthong [iə], starting from an upper front unrounded position and moving to a mid-central unrounded position is represented with [e] which occupies a mid-front position

- mid-way between the two points of articulation of the diphthong.
- (xii) [eə] is articulated initially in an upper mid-front rounded and moves to a mid-central unrounded position. It is represented in Croatian by the upper mid-front rounded monophthong [e]. Graphemic transference explains its infrequent realisation as [a].
 - (xiii) The diphthong [aɪ] is represented in Croatian by equivalents that also have sliding vowel qualities: low central rounded [a] or upper mid-front unrounded [e] plus semi-vowel [j]. Graphemic transference explains its infrequent realisation as [i].
 - (xiv) [ɔɪ] is articulated initially in mid-back rounded position and moves to a high front unrounded position. This is represented by the upper mid-back rounded monophthong [o] and semi-vowel [j].
 - (xv) [aʊ] is replaced with two Croatian monophthongs [a] + [u]. Both Croatian replacements correspond to the initial and final places of articulation of [aʊ].
 - (xvi) The diphthong [ʊə] is not found in the form of any English originals. This is unsurprising as the phonetic representation of [ʊə] varies considerably according to speaker and therefore its status as a diphthong is also disputed. Clark (1989) and Finegan et. al. (1992) record that the vowel quality in *tour* has a centralising off-glide and is given diphthongal representation, [ʊə]. Clark (1989:211) also reports that for some speakers the vowel quality is more rounded, [ʊ:], or even disyllabic, [ʊ:ə]. Durie and Hajek (1994) employ the following transcription, [ɔ:], according to an approach using a monophthongal representation for all long vowels with a tendency to centralising off-glides (1994:102). The variable realisation of [ʊə] is likely to limit the statistical frequency by which it is captured phonetically as the diphthong [ʊə].

Australian English diphthongs nearly always have 'descending' intonation, i.e. the first element is stressed or sonorous. Consequently, diphthongs are realised in Croatian by monophthongs only or monophthongs + semi-vowel /j/ that have the same place and manner of articulation as the initial element. The second or final vowel of the original is either not realised or is represented by a semi-vowel only. In only one instance is a diphthong realised disyllabically with two monophthongs.

Triphthongs

- (xvi) The triphthong [aɪə], which is articulated initially in a low central unrounded position, medially in a high front position and finally

in a mid-central position retains in its Croatian representation the first two elements. Final mid-central unrounded [ə] is replaced by upper mid-front unrounded [e].

Vowel phoneme substitution is compared here with the findings from other studies of English-Croatian contact. Surdučki (1978) includes Anglicisms found in homeland written sources and English elements found in the speech of immigrants in Canada. (The two sources of Anglicisms are separated by a slash: the first-given category refers to homeland sources; the second referst to emigre sources (see table 1 below).) Jutronic-Tihomirović's (1985) data are based on 1st, 2nd and 3rd generation speakers in Pennsylvania while Filipović's (1986, 1990) data largely contain Anglicisms present in homeland Croatian. Both Filipović and Surdučki recognise the influence of the graphemic form in determining choice of substituted vowel phoneme in homeland Anglicisms. Examples in which the graphemic form of the English original appears to be the determining factor are marked with brackets.

Table 1
 Comparison of transphonemisation of monophthongs

English Phoneme	Croatian Phoneme	Surdučki 1978	Jutronić-Tihomirović 1985	Filipović 1986, 1990	Present Study
i	→ i	+/+	+	+	+
	→ e+j	-/-	-	-	+
ɪ	→ i	+/+	+	+	+
	→ e	+/-	(+)	-	-
e/ɛ*	→ e	+/+	+	+	+
	→ i	-	+	-	-
	→ a	-/+	-	-	-
ɜ	→ e	+/+	+	+	+
	→ i	(+)/+	-	(+)	-
	→ o	-/-	(+)	-	-
	→ u	(+)/+	-	-	-
æ	→ r**	-/+	-	-	-
	→ e	+/+	+	+	+
a	→ a	+/+	+	-	(+)
	→ a	+/+	+	+	+
ʌ	→ a	+/+	+	+	+
	→ o	+/+	(+)	-	-
	→ u	-/(+)	(+)	-	(+)
ɒ	→ o	+/+	+	+	+
	→ a	+/+	+	-	-
ɔ	→ o	+/+	+	+	+
	→ u	-/-	+	-	-
	→ a+u	(+)/(+)	-	-	-
ɔ̃	→ u	+/+	+	+	+
	→ u	+/+	+	+	+
ə	→ i	-/-	+	+	+
	→ e	-/-	+	+	+
	→ a	+/+	+	+	+
	→ o	+/+	+	+	+
	→ u	+/+	+	+	+
	→ r	+/+	-	-	-

* The Australian mid-front vowel is generally articulated in a higher position and is usually represented by the phoneme /e/ (Durie & Hajek 1994:98; Finegan et al. 1992: 48). North American and British variants are usually articulated at a lower position and commonly represented as /ɛ/, (Ladefoged 1982:75).

** In Croatian /r/ may be either vocalic or non-vocalic. Vocalic /r/ is represented as [r̥].

*** According to Ladefoged, some Midwestern and Californian speakers do not distinguish between /a/, /ɒ/ and /ɔ/ (1982:76). Although Surdučki and Jutronić-Tihomirović do not include examples of speakers from these areas, substitution of /ɒ/ with /a/ in examples like 'shop' > /šap/ > [ʃap], 'block' > /blak/ > [blak] appears characteristic of North American English models.

Table 2
 Comparison of transphonemisation of diphthongs and triphthongs

English Phoneme	Croatian Phoneme	Surdučki 1978	Jutronic- Tihomirović 1985	Filipović 1986, 1990	Present Study
aɪ	→ a+j	+/+	+	+	+
	→ e+j	-/-	-	-	+
	→ i	(+)/(+)	(+)	-	(+)
eɪ	→ e+j	+/+	+	+	+
	→ a	-/-	-	-	+
	→ e	+/+	+	+	-
oʊ	→ o	+/+	+	+	+
aʊ	→ a+u	+/+	+	+	+
	→ o+v	+/-	-	+	-
	→ a	-/+	+	-	-
	→ o	-/+	-	-	-
	→ u	+/+	(+)	-	-
ɔɪ	→ o+j	+/+	+	+	+
ɪə	→ e	-/-	-	-	(+)
	→ i	+/+	+	+	-
	→ j+e+r	-/-	-	+	-
eə	→ e	+/+	+	+	+
	→ a	(+)/-	-	-	(+)
ʊə	→ u	+/+	+	+	+
aɪə	→ a+j	-/-	+	-	-
	→ a+j+e	-/+	-	-	+
aʊə	→ a+o	-/+	-	-	-

The findings of this study are comparable to those of studies which examine emigre and homeland situations. This is not the case with vowel phonemes. The processes which operate in the phonological integration of transfers appear to be the following: those phonemes which are not part of the Croatian inventory of phonemes are replaced by those Croatian phonemes which have the highest degree of similarity of features. This suggests that there is a certain primacy of the phonetic form of the English original which determines degree and type of phoneme replacement. Examples in which phoneme replacement does not follow this model can be attributed to the influence of the graphic form of the original where this differs recognisably from the phonetic form and/or idiosyncrasies of various informants and sources. Monophthongs are represented according to feature-similar Croatian models; diphthongs are reduced to monophthongs or monophthong + semi-vowel; triphthongs are replaced with monophthong + monophthong or semi-vowel.

4.0. Consonants

Croatian and Australian English each have 24 consonantal phonemes. Each language has six consonantal phonemes not found in the other. /ɲ/, /ŋ/, /x/, /x/, /tɕ/ (ć), /dʒ/ (đ) are not found in English. Consonantal phonemes not found in Croatian are: /θ/, /ð/, /ɹ/, /ɻ/, /w/, /h/.

Table 3
 Consonantal phonemes of Australian English

	Place of articulation								
	Bilabial	Labiodental	Interdental	Alveolar	Palato-alveolar	Palatal	Velar	Labio-velar	Glottal
Stops	p b			t d			k g		
Nasals	m			n			ŋ		
Fricatives		f v	θ ð	s z	ʃ ʒ				
Affricates					tʃ tʒ				
Approximants				ɹ		j		w	h
Laterals				l					

Table 4
 Consonantal phonemes of Croatian

	Place of articulation					
	Bilabial	Labiodental	Denti-alveolar	Palato-alveolar	Palatal	Velar
Stops	p b		t d			k g
Nasals	m		n		ɲ	
Fricatives		f v	s z	ʃ ʒ		x
Affricates			ts	tʃ tʒ	tɕ dʒ	
Approximants					j	
Laterals			l		ʎ	
Trills			r			

Where symbols appear in pairs, the one to the right represents a voiced consonant.

All Croatian consonantal phonemes can occur initially, medially and finally. In Australian English, /ŋ/ and /ʒ/ do not occur in initial position; /ɹ/, /w/, /h/ cannot occur finally. All other consonants can occur in any position.

The following instances of Croatian consonantal phonemes replacing English ones are observed:

- (i) Alveolar trill [r] replaces the post-alveolar approximant [ɹ] when it is voiced:

... a:... rent [rent] je relativno jeftin... (25,M,31)
... ah... rent [rent] is relatively cheap.

and when it is devoiced:

... možda ovi igraju kriket ['kriket] ili nogomet ovdje na pijesku...
(49,M,23)
... perhaps they're playing cricket ['kɹɪkət] or soccer here on the sand.

Alveolar trill [r] can occur in medial position preceding another consonant. Occurrence here is due almost certainly to graphemic influence of the English original in which the alveolar approximant is non-rhotacised.

... majice sa kratkih rukava, šorts [šorts], kupačke gaće.
(31,F,27)
... t-shirts with short sleeves, shorts [ʃɒts], bathers.

[r] also occurs in final position, replacing non-rhotacised /ɹ/ in most cases:

... kako se kaže, fiter, turner ['fiter, 'turner]... za stroj. (35,M,32)
... how do you say it, fitter, turner... for machinery.

but not in all:

... volim isto, kao... Sylvester Stallone, klifhanga ['klifhɑŋa]
volim... (54,M,16)
... I like also, like... Sylvester Stallone, cliffhanger ['klɪfhæŋə] I like...

- (ii) Influence of the graphemic form of the English original appears also to be present in some of the following examples. The grapheme (c) is always rendered as an alveolar affricate in Croatian which explains why [ts] replaces the alveolar fricative [s] from the original:

U kino idem van s prijatelji u citiju ['tsitiju], you know...
(90,F,16)
I go out to the cinema with friends to the city ['siti] you know...

In equivalent examples the graphemic form of the English transfer does not give rise to consonantal change and the alveolar fricative is retained:

... i onda su mi preporučili da idem u siti ['siti], tamo je bolje...
i tako. (53,M,32)

... and then they recommended to me to go to the city ['siti], it's better there... and so...

... učit kao na komjputeru i to prosesirati [prose'sirati] a ja nisam... (60,F,26)

... to learn like on the computer and to process ['proʊsəs] it, but I didn't...

(iii) Application of assimilation rules:

alveolar fricative → palato-alveolar fricative / ____ palato-alveolar affricate

... sve je bilo pre... prekinuto i, nisam voljela... samo ščupid ['tʃʊpid]... (5,F,17)

... everything was dis... disrupted and I didn't like it... (it was) just stupid ['stʃʊpəd]...

velar nasal – bilabial nasal / ____ bilabial (in some varieties of Croatian)

... u Sidnej, smo bili u Kamberi ['kamberi]... (28,M,31)

... in Sydney, we were in Canberra ['kænb(ə)rə]...

(iv) The glottal approximant [h] is not realised as its homograph in Croatian, the velar fricative [x], but remains unchanged:

Ne, imamo video i ne... ne hajramo ['hajramo] puno videos, gledamo sad (49,M,23)

No, we have a video and we don't... we don't hire ['haiə] a lot of videos, we watch now...

... ako je sin, ako je sin... ja bi ga poslao u haj skul, [haj skul] yeah... (20,M,18)

... if it's a son, if it's a son... I would send him to a high school [hai skʊl], yeah...

(v) Consonant phonemes which have no direct Croatian equivalents, such as /θ/, /ð/, /ɹ/, /ŋ/ are also retained. All other consonant and vowel phonemes are substituted with indigenous equivalents. These forms can be considered phonologically partially integrated. (See also below 5.0 – Partially integrated transfers.)

... kao... Nju South Wels [nju saʊθ wels] za šest, šest mjeseci... (17,M,22)

... like... New South Wales [nju saʊθ weɪlz] for six, six months...

... više prodamo kolače i tako dalje... yeah... i thets it [ðets it] yeah... (62,F,19)

... we sell more cakes and so on... yeah... and that's it [ðæts it], yeah...

- ... i ovi filmovi iz Holiwuda ['holiwuda] koji su... (7,M,21)
... and these films from Hollywood ['hɔliwɔd] which are...
... bio sam u Wulongongu ['wulongoŋgu], to je isto samo...
(12,M,25)
... I was in Woollongong ['wɔlɔŋgɔŋ], which is also jus...
... možda u... tamo... prema Džilongu ['dʒilɔŋgu] tamo...
Corio Bay... (83,M,24)
... maybe in... there... towards Geelong ['dʒɛlɔŋ] over there... Corio
Bay...

These consonant phonemes are also retained where /ɪ/ is replaced with /r/,

- Mislím da je u South Jeri, [səʊθ 'jeri] nisam, nisam siguran...
(8,M,20)
I think that it's in South Yarra [səʊθ 'jæɪə], I'm not, I'm not sure...
Vozimo se možda četiri, pet sati tamo u Kerangu, [ke'raŋgu]
blizu... (73,M,21)
We drive maybe four, five hours there to Kerang [kə'ɹæŋ], close to...
... gdje još nisam bio... u Darwinu ['darwinu] nisam i...
(21,M,27)
... where haven't I been... in Darwin ['da:wən] I haven't (been)
and...
... što onu gužvu dobiješ na friwej ['friwe:], ja to obidem.
(42,F,25)
... the heavy traffic on the freeway ['fɹiwei], I avoid that.

Replacement of donor-language consonantal phones by recipient-language phonemes operates according to the following pattern: those phonemes which have identical or near identical place and manner of articulation such as to the phonemes in the donor model replace these. These identically corresponding phonemes, /b/, /g/, /m/, /n/, /k/, /v/, /ʃ/, /z/ and /j/ constitute the largest group of consonantal phonemes. (See above table 3). Filipović (1986: 72) labels the swapping over of (near-) identical phonemes in the process of phonological integration “complete transphonemisation”.

Table 5
 Identical or complete transphonemisation of consonants

English Phoneme		Croatian Phoneme	English grapheme	Croatian grapheme
/b/	→	/b/	⟨b⟩	⟨b⟩
/g/	→	/g/	⟨g⟩	⟨g⟩
/m/	→	/m/	⟨m⟩	⟨m⟩
/v/	→	/v/	⟨v⟩	⟨v⟩
/ʃ/	→	/ʃ/	⟨sh⟩	⟨š⟩
/ʒ/	→	/ʒ/	⟨zh⟩	⟨ž⟩
/j/	→	/j/	⟨y⟩	⟨j⟩
/tʃ/	→	/tʃ/	⟨ch⟩	⟨č⟩
/dʒ/	→	/dʒ/	⟨j⟩	⟨dž⟩

Identical or complete transphonemisation also occurs for the phonemes /p/, /k/ and /l/ where they are realised in transfers which contain the phones [p], [k] and [l]. Where /p/, /k/ and /l/ are realised according to other (allo-) phones, such as [p^h] and [k^h] (in word initial or stressed syllable initial position), identical or complete transphonemisation cannot occur as these phones are not found in the Croatian phonological inventory. Filipović (1986) categorises these phonemes which have undergone a change in place of articulation but no or little change in manner of articulation as examples of “partial or compromise transphonemisation” (1986:72). Thus [p^h] and [k^h] are replaced with [p] and [k], ie. the voiceless stops /p/ and /k/ become unaspirated in word-initial or (stressed) syllable-initial position.

Table 6
 Partial or compromise transphonemisation of consonants (i)

English Allophones		English Phoneme		Croatian Phoneme	Homograph
[p], [p ^h]	↔	/p/	→	/p/	⟨p⟩
[k], [k ^h]	↔	/k/	→	/k/	⟨k⟩

The allophones of /ɹ/ – [ɹ] and [ɹ̥] – are invariably realised as /r/. This indicates that /ɹ/ and /r/, represented orthographically by the homograph ⟨r⟩, are perceived as corresponding phonemes. The same is true for the phonemes /t/, /d/, /s/, /z/, /n/ and /l/ which in English are alveolars and which correspond to the Croatian dento-alveolars /t/, /d/, /s/, /z/, /n/ and /l/. These phonemes therefore represent either a change in place of articulation, ie. /t/, /d/, /s/, /z/, /n/ and /l/ being articulated as denti-alveolars rather than alveolars, or manner of articulation, ie. /ɹ/ becoming a trill.

Table 7
 Partial or compromise transphonemisation of consonants (ii)

English Allophones		English Phoneme		Croatian Phoneme	Homograph
[ɹ], [ɹ̥]	↔	/ɹ/	→	/r/	⟨r⟩
[t], [tʰ]	↔	/t/	→	/t/	⟨t⟩
[d]	↔	/d/	→	/d/	⟨d⟩
[s]	↔	/s/	→	/s/	⟨s⟩
[z]	↔	/z/	→	/z/	⟨z⟩
[n]	↔	/n/	→	/n/	⟨n⟩
[l], [ɫ]	↔	/l/	→	/l/	⟨l⟩

Although the glottal approximant /h/ has a Croatian approximate equivalent – voiceless velar fricative /x/ graphemically represented by h, partial or compromise transphonemisation does not occur. The reason for this is that since the 17th century /x/ has occurred less and less frequently and is no longer present in most Štokavski dialects (Brozović & Ivić 1988:13). Literary Croatian retained the velar fricative which, due to normative pressures exerted by the standard, is beginning to re-emerge in many regional vernaculars. While non-occurrence of /x/, together with frequency of occurrence of other non-standard characteristics of regiolects is not measured from the interviews of all informants, the transcribed interviews of the informants (20, 49) whose examples are given above reveal that /x/ is not a phoneme within their Croatian phonological system. This indicates that for such speakers /h/ has no partial or compromise equivalent in Croatian and /h/ is not transphonemised. Amongst speakers who do produce /x/ in Croatian discourse it is not possible to observe if transphonemisation (i.e. process of allocation of phones in the recipient language) of /h/ occurs as no (integrated) transfers containing /h/ in the English original are found. This contrasts with Surdučki's (1976) findings from first-generation Croatian speakers. He finds that although /x/ is not present in many examples "u živom govoru" ("in live speech"), he reports that substitution of /h/ with /x/ is far more frequent:

"... ipak je supstitucija E /h/ sa SH /h/* daleko češća, kao da bilingvni pozajmljivači čine poseban napor da to /h/ zadrže (npr. /hem/ ham, /hard/ hard, /habi/ hobby itd.)" (Surdučki, 1976:347)

("... however, substitution of English /h/ with Serbo-Croatian /h/ (/x/) is far more frequent, as if bilingual borrowers are making a special effort to retain /h/ (/x/) (e.g. /hem/ [xem] ham, /hard/ [xard] hard, /habi/ [xabi] hobby etc.") (My translation.)

(* Surdučki is referring here to the velar fricative /x/ which I give in brackets in the translation.)

Thus /h/ is not transphonemised according to any Croatian equivalent.

Table 8
 Non-transphonemisation of consonants

English Allophones		English Phoneme		Croatian Phoneme	Homograph
/h/	↔	x	→	(/x/)	⟨h⟩

The last group of phonemes, /θ/, /ð/, /w/ and /ŋ/ have no direct or approximate articulatory equivalents in the recipient language and are not replaced with recipient phonemes but retain their original place and manner of articulation.

Table 9
 Non-transphonemisation of free transphonemisation of consonants

English Phoneme				Croatian Phoneme Replacement*
/θ/	—	x	→	/t/
/ð/	—	x	→	/d/
/w/	—	x	→	/v/
/ŋ/	—	x	→	/n/+g/

* Homeland Croatian typically applies transphonemisation to the above four English-specific phonemes, resulting in replacement with /t/, /d/, /v/ and /n/ + /g/ respectively – see Filipović 1990:30–31.

Phoneme non-replacement appears to be contrary to the general tendencies found amongst other consonants and vowels. The reason/s for phoneme non-replacement may be linguistic and/or sociolinguistic.

The articulatory ‘distance’ between these phonemes and recipient-language phonemes may be a disincentive for transphonemisation in as much as the usual ‘candidates’ for replacement, i.e. /s/ or /t/ for /θ/; /z/ or /d/ for /ð/; /v/ for /w/; /n/ + /g/ for /ŋ/, already function as the phoneme replacements for other donor-language phonemes.

Transphonemisation of this group of phonemes is commonplace amongst first-generation speakers, the parents of the informants. Surdučki (1978) reports that amongst first-generation informants, /θ/, /ð/, /w/ and /ŋ/ are invariably replaced with /t/, /d/, /v/ and /n/ respectively (1978:344–5). Stoffel (1981a) reports similar replacing of /w/ and /ŋ/ amongst first-generation Croatian speakers in New Zealand (1981a:246) while Jutronić-Tihomirović (1985)

reports phoneme replacement for all four phonemes but does not indicate if this is specific to the first generation only (1985:29). From observation I note that a number of first-generation speakers are able to and do articulate some or all of the phonemes /θ/, /ð/, /w/ and /ŋ/, but it is their replacement by Croatian phonemes that is one of the stereotypical characteristics of English speech of the first-generation and therefore an indicator of first-generation 'membership'. Phoneme replacement in monolingual English discourse and for English transfers in Croatian discourse is one of the proto-typical linguistic characteristics of this generation.

The situation is different for the second generation. Second-generation speakers do not follow their parents' transphonemisation habits in monolingual English discourse as they have native or native-like proficiency in English. Where in the context of this study there is an asymmetric relationship between the two languages in regard to prestige and status there are likely to be few incentives for second-generation speakers to 'mark' their speech by changing the place and manner of articulation of phonemes when speaking the high-status language, English. When speaking Croatian the same may apply. Transphonemisation readily occurs for those English phonemes, including /ɹ/, which have identical or near-identical manner and place of articulation as recipient-language phonemes, but those English phonemes which do not have Croatian equivalents remain unchanged because this is one of the indicators of native or native-like proficiency in English, the high-status language, and membership of the second generation. Non-transphonemisation may be one of the linguistic means employed by one generational group in distinguishing itself from another.

However, there is evidence from elsewhere in the sample that non-transphonemisation of /θ/, /ð/, /w/ and /ŋ/ is a linguistic feature indicating generational membership. Generational membership, as signified by ability to produce English origin items according to their original phonetic form in English, can be expressed through *completely* unintegrated forms (i.e. code switches – either single or multiple items). And this is what informants do. The incidence of code-switches (numbering 3968) is over ten times that of integrated lexical transfers. (Code-switching is, of course, a linguistic strategy not solely motivated by Speaker's supposed need to position themselves sociolinguistically, but, sociolinguistic inferences made on the basis (and type) of code-switching remain an inevitability.) This indicates that non-transphonemisation of /θ/, /ð/, /w/ and /ŋ/ is unlikely to be motivated by sociolinguistic factors.

The motivating factor responsible for non-transphonemisation of /θ/, /ð/, /w/ and /ŋ/ appears to be linguistic. The articulatory distance between /θ/, /ð/, /w/, /ŋ/ and any Croatian phonemes is perceived to be sufficiently great that transphonemisation ceases to be a felicitous option, or, replacement with the phonemes that homeland Croatian usually substitutes for /θ/, /ð/, /w/, /ŋ/,

namely /t/, /d/, /v/, /n/+/g/, are also not seen as felicitous alternatives. In the absence of likely ‘candidates’ for substitution, importation remains the only option.

5.0. Partially integrated transfers

Partially integrated transfers are the consequence of the processes, *substitution* and *importation* operating at the same time. In the following phonetic transcriptions of transfers given in square brackets, those phones peculiar to Australian English are italicised.

A. Single-word transfers with ‘incomplete’ phonological integration

Some single-word transfers bear phonemes peculiar to each language:

... čistije nego što se u operaciji radi... u theateru ['θɪətəru], to je puno čistije... (53,M,32)

... *cleaner than when an operation is done... in an (operating) theatre* ['θi:tətə], *it's much cleaner...*

... više prodamo kolače i tako dalje... yeah... i thets it [ðets it], yeah... (62,F,19)

... *we sell more cakes and so on... yeah... and that's it* [ðæts it], *yeah...*

... i studirao science i završio u kemiju ili biokemiju ['baɪoʊkemiju] na kraju... (58,M,27)

... *and I studied science and finished up doing chemistry or biochemistry* [baɪoʊ'kemɪstri]... *in the end...*

... i ovi filmovi iz Holiwuda ['holiwuda] koji su... (7,M,21)

... *and these films from Hollywood* ['hɒliwɒd] *which are...*

... bio sam u Wulongongu ['wulongɔŋgu], to je isto samo... (12,M,25)

... *I was in Woollongong* ['wulongɔŋ] *which is also just...*

These examples reflect the findings of section 4.0 above.

B. Multiple-word lexical transfers with ‘incomplete’ phonological integration.

Syntagmatically associated multiple-word units such as compound nouns or Adj+N constructions with a high level of statistical co-occurrence may contain one or more unit which is completely integrated while the other unit/s are represented with:

i) the form of the original (English) units:

... mi smo bili, znaš malo plesali, imali social drink [soʊʃəl driŋk] i tako. (8,M,20)

... *we were, you know, we danced a bit, we had a social drink* [soʊʃəl drɪŋk] *and so on...*

Mislim da je u South Jari [səʊθ jəri], nisam... nisam, er... certain, ali mislim da je u South Jari [səʊθ jəri], i smo tamo... (8,M,20)

... *I think that it's in South Yarra* [səʊθ jæɪə], *I'm not... I'm not, er... certain, but I think that it's in South Yarra and there we were...*

... po Viktoriji sam bila već na Phillip Ajlend [fɪləp əjlend], Mount Dandenong. (42,F,25)

... *around Victoria I've already been to Phillip Island* [fɪləp əɪlənd], Mount Dandenong...

ii) Croatian equivalents:

... ljudi što sidu... auto, rabiš [rabiʃ] kanta, svjetla, sve like... kuća... i sky... (90,F,16)

... *people sitting... a car, a rubbish bin, lights, all like... a house... and sky...*

iii) or the multiple word transfers may be made up of unassimilated units from both languages:

... išao radit u, znaš, kao... Novi South Wales [novi səʊθ weɪtʃ] za šest, šest... sedam... (17,M,22)

... *then I went to work in, you know, like... New South Wales* [njʌ səʊθ weɪtʃ] *for six, six... seven...*

... um... yeah, ja idem u Western... Western bolnica [westən bolnitsa] u Futskrej... (5,F,17)

... *um... yeah, I go to the Western... Western Hospital in Footscray...*

Na Tazmaniji... um... Južnoj Australiji, u Western Australiji ['westən aus'traliji] još nikad... (28,M,31)

In Tasmania... um... South Australia, in Western Australia ['westən əs'treɪljə] I (haven't) yet been...

... um, isto sam bio u South Australiji [səʊθ aus'traliji] i... *više puta u... Južna Australija i...* (26,M,22)

... *um, also I have been to South Australia and... many times in... South Australia...*

... ali najviše u Viktoriju... kad ima long vikend [lɒŋ vɪkənd] ili ako imamo vremena... (31,F,27)

... *but most of all in Victoria... when there's a long weekend or if we have time...*

In the second last example, *South Australiji* is followed by its translated Croatian equivalent, *Južna Australija*. It is not clear whether this 'correction' is

motivated by the informant's uneasiness with alternation occurring within a compound noun or a general desire to 'repair' transfers by giving indigenous equivalents immediately following the transfers. This type of 'repairing' was evident elsewhere in the interview.

The form *vikend* in *long vikend* may itself be considered a phonologically integrated transfer. It is not clear exactly when *vikend* became a widely understood and accepted loanword, however it did enjoy wide currency of use by the mid-1950s. It is a productive lexeme to which suffixes can be attached, e.g. *vikendica* 'holiday house', *vikendaš* 'weekend holiday-maker', and was a form probably known to the informant's parents when they migrated in 1968. Nevertheless, Surdučki considers *vikend* both a homeland loanword and a transfer found amongst emigres (1976:213) although the time of their departure from the homeland (early 1920s to mid-1960s) was generally earlier than those in this study.

C. Compromise Forms

Some transfers appear to occupy a position somewhere between the English original and the Croatian equivalent:

Tasmania/Tasmanija

[tæz'mem(t)jə] → ... nisam bio u Tazmaniji ['tazmaniji], nisam još
['tasmanija] → bio... (21,M,27)
... *I haven't been to Tasmania, I haven't yet been...*

Scots/Škoti

[skòts] → ... ovi Englezi što su oni radili, ah, sa Škots [ʃkòts],
['ʃkòti] → ne znam... (67,M,22)
... *these English, what they did, ah, with the Scots, I don't know...*

Lebanese/Libanonac

[lebən'iz] → ... on nije Hrvat, on je Libanez [liban'ez]... (94,
[li'banats] → F,17)
... *he is not a Croat, he's (a) Lebanese*

dad/tata

[dæ:d]

['tata]

→ ... ali, za... moj tat [tat], moj otac ima biznes gore,
pa yeah... (18,F,20)
... *but my dad, my father has a business up there, so
yeah...*

traditional/tradicionalno

[trə'dij(ə)nəl]

['traditsijonalno]

→ ... kako bi rekla, ah... tradišijalno... [tra'dijjalno]
(80,F,20)
... *how would I say, ah... traditional...*

Compromise forms may consist of combinations of phonemes and/or morphemes that may differ from one language but which still do not assume the form of phonemes and/or morphemes of the other language. Without additional information in regard to what is the usual choice of language of discourse and which language transfers habitually come from, it would be almost impossible to discern from which language these transfers are 'based' and into which language they are being integrated.

6.0. Stability and variation in form

Stability in form is defined as stability in the phonetic form of an item. This definition excludes phonetic changes or additions resulting from affixation of morphological markers. There are 15 referents for which 54 varying phonetic realisations are recorded – almost 15% of the 363 lexical transfers. With the exception of *Saint Albans* which has four phonetic realisations, variation gives rise to two different phonetic forms. Variation often mirrors the difference between graphemic and phonetic form of the English original. The differing phones are highlighted with double underlining.

... um, tata je napravio tu kuću kad je bila nova erija ['erija]... (27,M,20)

... *um, dad built this house when it was a new area ['eəriə]...*

... Yeah, to je stara arija ['arija], nema puno mladi, nema puno Hrvata tamo... (19,M,23)

Yeah, that's an old area, there aren't many young people, there aren't many Croats there...

... i onda su mi preporučili da idem u siti ['siti]..., tamo je bolje... i tako... (53,M,32)

... *and then he recommended to me to go to the city ['siti], it's better there... and so...*

... u kino, idem van sa prijatelji u citiju ['tʃitiju]..., you know... (90,F,16)
... to the cinema, I go out with friends to the city, you know...

Hladno je... i sve to nosiju džekets ['dʒekets] i sve to... (56,M,21)
It's cold... and all are wearing jackets ['dʒækəts] and all that...

Nije hladno... možeš vidit kako ljudi nosu džakete [dʒa'kete]... i um...
(86,M,18)

It's not cold... you can see how the people are wearing jackets... and um...

In another case, different realisations of diphthongs give cause to variation:

... baš smo prošli tjedan bili u jedan čajniz ['tʃaj̯niz] restaurant... i bilo je... (41,F,21)

... just last week we were at a Chinese ['tʃaɪ̯niz, tʃaɪ̯'niz] restaurant... and it was...

... volim puno u čejniz ['tʃej̯niz] restorane da idem... ah... i malo junk-food isto, znaš... (84,M,20)

I like to go a lot to Chinese restaurants... ah... and a little junk-food as well, you know...

Variation is also determined by application and non-application of rules:

a) Phonological assimilation rule operating in some varieties of Croatian: velar nasal → bilabial nasal / ____ bilabial:

Oh, isto sam bila u Kamberi ['kaɲberi] ... to je prije... tri, četiri godine...
(62,F,19)

Oh, I've also been to Canberra ['kænb(ə)ɾə]... that was... three, four years ago...

Nisam, samo sam bila u Kanberu ['kaɲberu] u jedanaesti razred, tu smo išli sa... sa... (22,F,17)

I haven't, I've only been to Canberra in year eleven, there we went with... with...

Other instances are apparent as idiosyncratic mispronunciations:

... želila bi, um... da nastavim nešto sa sihologiji [sihiologiji]... vidit ću kako ide... (62,F,19)

... I would like, um... to continue something with psychology ['saɪkɔlədʒi]... I'll see how it goes...

... um... pfizijologika [pfizijologika]... psychology i human development... ah, pfizijolodžija [pfizijolodžija]... (88,F,17)

... um... psychology... psychology and human development... ah, psychology...

The name of the suburb *Saint Albans* [sɛnt əlbənz] or [sənt əlbənz] (speakers with 'broad Australian' pronunciation may produce [sɛ'ɪn əlbənz] or even

[sər ɔbəz]) in which there is a high concentration of Croatian-speakers is realised in four different ways:

... momentalno živim u Sajnt Albans [sajnt albans], ah... tamo živim od osamdeset osme... (25,M,31)

... *at the moment I'm living in Saint Albans, ah... I've been living there since '88...*

Išla sam isto u Sent Alibans [sent alibans], zove se, zvala se Holy Eucharist... to je... (62,F,19)

I also went to Saint Albans, it's called, it was called Holy Eucharist... that's only...

Yeah... ona je u deseti razred, ona ide u CRC Sent Albans [sent albans]... (62,F,19)

Yeah... she's in year ten, she goes to CRC Saint Albans...

Mm... ne, ja nisam išao u školu, kad smo živjeli u Sant Albansu [sant albans]... yeah... (92,M,16)

Mm... no, I didn't go to school, when we were living in Saint Albans... yeah...

By far the most widespread pronunciation is the latter one, *Sant Albans*, given eleven times by various informants. Realisation appears to be based on transphonemisation of the schwa [ə] rather than diphthongised [eɪ] pronunciation in *Saint*, as [eɪ] is generally transphonemised as [e] or [ej]. The graphemic shape of the English original is also likely to favour transphonemisation to [a].

Variation is not statistically infrequent and not unexpected. Variation in type and form of the phonological integration of identical transfers is recorded in other treatments in the area, e.g. Surdučki, 1976; Filipović, 1990; Leoni, 1991. Here again it is found that variation is primarily due to the realisation of differences between either phonetically based or graphemically based models, while various realisations resulting from differences in integrating phonotactically non-corresponding consonant or vowel combinations appear to be of secondary importance.

7.0. Conclusion

The data underline the following. Phonological integration is a relative rather than absolute concept, firstly depending on linguistic competence (and eventually sociolinguistic profile) of Speaker. At the same time integration may represent substitution with recipient language phones or substitution with phones which are 'somewhere between' corresponding phones from the respective codes or phonological competences of Speaker. Here again, phonological integration is seen as a relative rather than absolute process offering a continuum of phonetic possibilities. As is shown here, substitution of /θ/,

/ð/, /w/ and /ŋ/ is not a felicitous option as it is in homeland Croatian which indicates that according to phonological competence of Speaker, transphonemisation can be constrained by perceived linguistic distance between phonemes. Myers-Scotton (1993) points similarly to the influence of Speaker's competence and sociolinguistic factors which result in variation in type and degree of phonological integration. In a different language contact situation (Kenya) Myers-Scotton (1993) locates similar psycho-sociolinguistic causes for non- or partial integration to ones operating in the present study: higher socio-economic prestige of the language which is the donor language; the 'flooding' of power-laden speech events by the socially dominant language; prominence of socially dominant donor language in the educational system accessed by Speaker (1993:177).

Variation in form, affecting nearly 18% of lexical transfers is also a prominent characteristic. While variationists, most notably Labov (1966), Bailey (1973) and Bickerton (1975), have demonstrated that what was previously considered to be 'free variation' is in fact governed by laws, examples of variation here do not pattern in any particular way, either according to context or position of item in discourse, or according to gender or age of informant. Variation is more likely to be a consequence of a variety of factors — a) non-established patterns of phonological integration amongst second-generation informants (and possibly amongst first-generation members who are the Croatian linguistic models of the informants); b) absence of macro-linguistic forces which codify and formalise incoming elements within a speech community; c) difficulty with which Speaker's Croatian communicative competence, acquired in a functionally restricted environment, phonologically 'takes on' items not part of the (home/family) domain in which Croatian was acquired. Variation and the extremely low number of English-origin items which are phonologically integrated indicates that second-generation speakers generally do not 'transphonemise' and the low percentage of phonologically integrated transfers may reveal that their usage is also marked.

References

- Albin, A. and R. Alexander. 1972. *The Speech of Yugoslav Immigrants in San Pedro, California*. The Hague : Martinus Nijhoff.
- Albin, A. 1976. A Yugoslav community in San Pedro, California. *General Linguistics* 16, 78–94.
- Appel, R. and P. Muysken. 1987. *Language Contact and Bilingualism*. London : E. Arnold.
- Baetens Beardsmore, H. 1982. *Bilingualism: Basic principles*. Clevedon, Avon : Multilingual Matters.
- Bailey, C. J. 1973. *Variation in Linguistic Theory*. Washington DC : Center for Applied Linguistics.

- Barić, E. et al. 1990. *Gramatika hrvatskoga književnog jezika*. Zagreb : Školska knjiga.
- Bickerton, D. 1971. Inherent variability and variable rules. *Foundations of Language* 7, 457–92.
- Brozović, D. 1973. O ortoepskoj vrijednosti dugoga i produženoga ijekavskog jata. *Jezik* XX, 65–74, 106–118, 142–149.
- Brozović, D. and P. Ivić. 1988. *Jezik, srpskohrvatski/hrvatskosrpski, hrvatski ili srpski*. Zagreb : Jugoslavenski leksikografski zavod »Miroslav Krleža«.
- Clark, J. E. 1989. Some proposals for a revised phonetic transcription of Australian English. In: P. Collins & D. Blair (eds). *Australian English, the language of a new society*. 205–213. St. Lucia: University of Queensland Press.
- Clyne, M. 1967. *Transference and Triggering*. The Hague : Martinus Nijhoff.
- Clyne, M. 1991. *Community Languages. The Australian Experience*. Cambridge : Cambridge University Press.
- Durie, M. and J. Hajek 1994. A revised standard phonemic orthography for Australian English vowels. *Australian Journal of Pragmatics* 14, 93–107.
- Filipović, R. 1961. The Morphological Adaptation of English Loan-Words in Serbo-Croat. *Studia Romanica et Anglicana Zagrabiensia* 11, 91–104.
- Filipović, R. 1977. Primary and Secondary Adaptation of Loan-Words. *Wiener slavistisches Jahrbuch* 23, 116–125.
- Filipović, R. 1978. Tipovi transfonemizacije u jezicima u kontaktu. *Filologija* 8, 99–106.
- Filipović, R. 1981. Hrvatski dijalekti u kontaktu s engleskim jezikom na području SAD. *Hrvatski dijalektološki zbornik* V, 33–39.
- Filipović, R. 1983. Croatian dialects in the United States: Sociolinguistic aspects. *Folia Slavica* 6:2, 278–292.
- Filipović, R. 1984. Inovacije u teoriji jezika u kontaktu. In: O. Mišeska-Tomić (ed.). *Jazičnite kontakti vo jugoslovenskata zaednica*, 3–9. Skopje.
- Filipović, R. 1986. *Teorija jezika u kontaktu*. Zagreb : Školska knjiga.
- Filipović, R. 1990. *Anglicizmi u hrvatskom ili srpskom jeziku*. Zagreb : Školska knjiga.
- Finegan E. et al. 1992. *Language. Its Structure and Use*. Sydney : Harcourt Brace & Company.
- Gasinski, T. 1986. English elements in the speech of the Croatian immigrant community of Santa Clara Valley, California. *Zbornik Matice srpske za filologiju i lingvistiku* XXIX:2, 31–45.
- Halmari, H. 1997. *Government and Codeswitching. Explaining American Finnish*. Amsterdam : John Benjamins.
- Haugen, E. 1956. *Bilingualism in the Americas*. Alabama : American Dialect Society.
- Jutronic, D. 1974. The Serbo-Croatian language in Steelton, PA. *General Linguistics* 14, 15–34.
- Jutronic, D. 1976. Language maintenance and language shift of the Serbo-Croatian language in Steelton, Pennsylvania. *General Linguistics* 16, 166–186.

- Jutronić, D. 1982. The effect of dialectal variations on the adaptation of loanwords. *International Journal of Slavic Linguistics* 5, 63–73.
- Jutronić-Tihomirović, D. 1983. A contribution to the study of syntactic interference in language contact. *Folia Slavica* 6:2, 310–320.
- Jutronić-Tihomirović, D. 1985. *Hrvatski jezik u SAD*. Split : Logos.
- Labov, W. 1966. *The social stratification of English in New York City*. Washington, DC: Center for Applied Linguistics.
- Ladefoged, P. 1982. *A Course in Phonetics*. San Diego : Harcourt Brace Jovanovich.
- Leoni, F. 1991. *Vocabolario Australitaliano*. Melbourne : CIS.
- Macquarie Dictionary*, 1981. Sydney : Macquarie Library Pty. Ltd.
- Mihaljević, M. 1988. Govor naše djece u dijaspori. *Rasprave Zavoda za jezik* 14, 127–137.
- Muhvić-Dimanovski, V. 1990. Some recent semantic loans of English origin in Serbo-Croatian. In: R. Filipović, M. Bratanić (ed.). *Languages in contact. Proceedings of the symposium of the 12th international congress of anthropological and ethnological sciences. Zagreb, July 25–27, 1988*. 151–7. Zagreb : Institute of Linguistics, University of Zagreb.
- Myers-Scotton, C. 1993a. *Duelling Languages. Grammatical Structure in Code-switching*. Oxford: Oxford University Press.
- Myers-Scotton, C. 1995. A lexically based model of code-switching. In: L. Milroy, P. Muysken (ed.). *One Speaker, Two Languages. Cross-disciplinary Perspectives on Code-switching*. 233–256. Cambridge: Cambridge University Press.
- Nortier, J. and H. Schatz. 1992. From one-word switch to loan: A comparison between five language pairs. *Multilingua* 11:2, 173–194
- Poplack, S. 1980. Sometimes I'll start a sentence in Spanish y termino en español: toward a typology of code-switching. *Linguistics* 18, 581–618.
- Poplack, S. and D. Sankoff, 1984. Borrowing: the synchrony of integration. *Linguistics* 22, 99–135.
- Poplack, S., D. Sankoff and C. Miller, 1988. The social correlates and linguistic processes of lexical borrowing and assimilation. *Linguistics* 26, 47–104.
- Stoffel, H.-P. 1981a. The morphological adaptation of loanwords from English in New Zealand Serbo-Croatian. *Wiener slawistischer Almanach* 7, 243–252.
- Stoffel, H.-P. 1981b. Observations on the Serbo-Croatian Language in New Zealand. *New Zealand Slavonic Journal* 1, 53–64.
- Stoffel, H.-P. 1983. Secondary derivation from English loanwords in New Zealand Serbo-Croatian dialects. *Wiener slawistischer Almanach* 12, 294–301.
- Stoffel, H.-P. 1988. Slavisches in Polynesien. Zur Geschichte des serbokroatisch-maorisch-englischen Sprachkontakts in Neuseeland. In: B. Christa et al. (ed.). *Slavic themes. Papers from two hemispheres*, 349–370. Neuried : Hieronymus.
- Stoffel, H.-P. 1991. Common features in the morphological adaptation of English loanwords in migrant Serbo-Croatian. In: V. Ivir, D. Kalogjera (Ed.)

- Languages in Contact and Contrast*, 417–430. Berlin : Mouton de Gruyter.
- Stoffel, H.-P. 1993. Slav migrant languages in the 'New World': Cases of *Migranto-before-death?* *Australian Slavonic and East European Studies* 7:1, 75–89.
- Stoffel, H.-P. 1994. Dialect and Standard Language in a Migrant Situation: The Case of New Zealand Croatian. *New Zealand Slavonic Journal* 13, 153–170.
- Surdučki, M. 1966. English loanwords in the Serbo-Croatian immigrant press. *Canadian Journal of Linguistics* 12:1, 52–63, 12:2, 123–135.
- Surdučki, M. 1978a. *Srpskohrvatski i engleski u kontaktu*. Novi Sad : Matica srpska.
- Surdučki, M. 1978b. Noun Compounding by Juxtaposition in Serbo-Croatian. *Canadian Slavonic Papers* 3/20, 398–404.
- Surdučki, M. 1983. Standardni srpskohrvatski i iseljenički srpskohrvatski u kontaktu s engleskim: sličnosti i razlike. *Zbornik Matice srpske za filologiju i lingvistiku* XXVI:2, 101–108.
- Surdučki, M. 1984. English-Serbo-Croatian contacts in Canada and Yugoslavia. *Melbourne Slavonic Studies* 18, 15–26.
- Škara, D. 1986/87. Prilog proučavanju anglicizama u hrvatskom ili srpskom jeziku. *Radovi Filozofskoga fakulteta u Zadru, Razdio filoloških znanosti* 16, 113–122.
- Treffers-Daller, J. 1994. *Mixing Two Languages. French-Dutch Contact in a Comparative Perspective*. Berlin: Mouton de Gruyter.
- Weinreich, U. 1953. *Languages in Contact*. The Hague : Mouton

Fonološka integracija engleskih transfera u hrvatski jezik: primjeri iz hrvatskog govornog jezika Australaca hrvatskog podrijetla, pripadnika druge iseljeničke generacije

Sažetak

U ovom je tekstu pokazan i istražen proces fonološke integracije (proces supstitucije fonema iz jezika davaoca fonemima iz jezika primaoca) leksičkih transfera podrijetlom iz engleskog jezika u hrvatskom govoru pripadnika druge iseljeničke generacije u Australiji. Pri izboru hrvatskih fonema koji će zamijeniti engleske foneme primaran je faktor izvorni fonetski oblik transfera, a sekundaran je faktor njegov grafemski oblik. Pokazuje se da se australskoengleski samoglasnički fonemi kojima nema odgovarajućih ekvivalenata u hrvatskom sustavu samoglasničkih fonema (npr. određeni jednoglasnici, dvoglasnici, troglasnici) zamjenjuju hrvatskim fonemima koji su im najbliži po mjestu tvorbe, tj. vrši se djelomična ili kompromisna transfonemizacija po definiciji R. Filipovića (1978). To vrijedi i za suglasničke foneme koji također podliježu procesu potpune ili djelomične transfonemizacije, izuzev skupine određenih fonema, /θ/, /ð/, /w/, /ŋ/, koji čuvaju svoj izvorni oblik i ostanu "netransfonemizirani". Prema tome mogu se pojaviti različiti oblici unutar kojih ima i promijenjenih i nepromijenjenih fonema, pa se može ustvrditi da je fonološka integracija više relativan nego apsolutan proces. Taj se proces može predstaviti skalom od fonema iz jezika davaoca s jedne strane do fonema iz jezika primaoca s druge, gdje se dopušta supstitucija fonemima čija se fonetska vrijednost nalazi bilo gdje na toj skali. Dakle, integracija pojedinog transfera može u cjelini biti ili djelomična ili potpuna.

Postoje lingvistički razlozi, a možda i sociolingvistički, za "netransfonemizaciju" skupine suglasnika /θ/, /ð/, /w/, /ŋ/. Po mjestu tvorbe osjeća se da je *udaljenost* tih fonema od bilo kojih hrvatskih fonema takva da njihova zamjena hrvatskim fonemima, odnosno njihova transfonemizacija, ne bi predstavljala umjesnu opciju. Po sociolingvističkim kriterijima njihova "netransfonemizacija" može se smatrati pokazujućom oznakom poznavanja engleskoga, pa i generacijske pripadnosti govornika. U korpusu međutim ima i dosta dokaza koji tomu sociolingvističkom faktoru ne govore u prilog, odnosno da je mnogo veća vjerojatnost da se generacijska pripadnost izražava putem drugih jezičnih modela, npr. prijelazom usred govora u engleski jezik (*code-switching*).

Ključne riječi: hrvatski jezik, engleski jezik, transfonemizacija, prijelaz s jezika na jezik

Key words: Croatian, English, transphonemisation, code-switching