UDC 801. 541. 3
Original scientific paper
Accepted for publication on 26 December 1981

Morphological Categories in Linguistic Borrowing

Rudolf Filipović
Faculty of Philosophy, Zagreb

In the process of linguistic borrowing, when the model (the foreign word from the donor language) turns into the replica (the loanword in the borrowing language), its adaptation on the morphological level primarily concerns the formation of its citation form. At the same time it is determined to which part of speech the loanword belongs. Following two new concepts which the author introduces into the classification of changes in linguistic borowing, he concludes that: a) in primary adaptation loanwords remain in the same word class; b) in secondary adaptation loanwords can change the word class which they belonged to in the donor language. The author analyses three parts of speech of English loanwords (substantives, verbs, and adjectives) to show the changes and their consequences.

1.0. When we examine the adaptation of loanwords on the morphological level, two elements have to be analyzed: a) their *citation form* (i. e. hov it is formed), and b) *morphological categories* to see to which degree morphemic integration of loan material has been carried out. The analysis of the citation form is made on the basis of *transmorphemization*[1] whose three types cover all possible forms of the citation form (Filipović, 1980).

1.1. *Zero transmorphemization* deals with all the cases when the citation form of a replica (a loanword) does not show

[1] Transmorphemization is one of the forms of substitution, (See: Filipović, R. 1980).

any formal difference from the citation form of the model (the foreign word).[2]

E	SC
bridge	bridž
nylon	najlon
scout	skaut
rugby	ragbi
interview	intervju

1.2. *Compromise transmorphemization* represents what is also called a compromise replica on the morphological level. It consists of two elements: the adapted base or stem and the unadapted formants or suffixes which are not integrated into the morphological system of the receipient language.

E	SC
farmer	farm-er
parking	park-ing

1.3. *Complete transmorphemization* corresponds to the replica completely adapted on the morphological level and consequently is formally and entirely integrated into the morphological system of the receipient language.

E	SC
boxer	boks-ač
to box	boks-a-ti
to test	test-ir-a-ti
folklore (sb)	folklor-an (adj)

1.4. The first stage of morphological adaptation — transmorphemization — can be analyzed very efficiently and we had no problems in applying it in our Project dealing with about twenty European languages.[3] However, this formal analysis of how English citation forms are adapted and integrated into the system of a borrowing language does not cover morphological categories. Therefore, we propose to discuss them in this paper.

2.0. If we begin with Einar Haugen's statement (Haugen, 1956, p. 57, § 3.5.3) that "languages which have parallel

[2] Illustrations for this paper are taken from our project "The English Element in European Languages". (See: Filipović, R. 1972, 1974, 1977b). We have chosen Serbo-Croatian as a borrowing language because it differs from English genetically and structurally.

[3] They are: Albanian, Danish, Dutch, Finnish, French, German, Hungarian, Icelandic, Italian, Latvian, Lithuanian, Macedonian, Norwegian, Polish, Romanian, Russian, Serbo-Croatian, Slovak, Slovene, Spanish, Swedish, Turkish.

structures have little difficulty integrating loan material: nouns are accepted as nouns and given inflections and syntactic position of nouns, adjectives are accepted as adjectives, etc.", we shall notice that some parts of speech do not behave so regularly and that the transfer of morphological categories requires a very careful treatment especially when languages of different morphological structures come into contact.

2.1. The corpus we are working with in analyzing the English element in European languages contains almost exclusively examples of four parts of speech: nouns, verbs, adjectives and adverbs. Since adverbs very seldom occur and then only as converted adjectives, our analysis is restricted to three main parts of speech: nouns, verbs and adjectives. In the statistical data given by Einar Haugen (1969, p. 406)[4] there is a great predominance of nouns over verbs and andjectives, which is also confirmed by our corpus. Therefore, we have decided to analyse the following: nouns and the category of gender, verbs and the category of verbal aspect and adjectives showing some features of adaptation not found in the other two parts of speech.

2.2. In the analysis of these parts of speech and their morphological categories we came across some difficulties in our attempt to use previous forms and types of analysis. It soon became obvious that the analysis of morphemic integration required some specific types of analysis. Therefore we applied the methodology we had devised for our investigation on the semantic level (Filipović 1977c). The original methodology was expanded by two new concepts: primary adaptation and secondary adaptation which imply two elements: chronological and qualitative. By means of such an extended method we managed to analyse and classify some of the morphemic loan material more successflully than we would have been able to, had we applied the old method of analysis on the morphological level (Filipović 1961).

3.1. NOUNS. When applied to morphemic integration of nouns, the two-concept approach, primary adaptation with primary changes and secondary adaptation with secondary changes, makes it possible to distinguish two stages in the

[4] Einar Haugen (1969, p. 406) gives the percentage for American Norwegian: nouns — 75,5%, verbs — 18,4%, adjectives — 3,4%.

morphemic integration of nouns. The primary fixes the citation form following one of three types of transmorphemization. It also partly regulates the category of gender when gender is assigned by a zero-mark. That is the case when the assignment of gender is based on certain associtations with forms in the native vocabulary of the borrowing language. It is fixed on the basis of similarities of sound (Haugen, 1969, p. 441) and no formal marks of gender are used.

Most English *loanwords — nouns* in S—C are assigned gender in this way. They follow the masculine tendency applied in the majority of borrowing languages which have the category of grammatical gender. Nearly all nouns that have been assigned masculine gender as a result of this masculine tendency, agree with the general rule of S—C gender that nouns ending in a consonant are masculine.

E gin	SC džin (m)
jeep	džip (m)
boycott	bojkot (m)
sport	sport (m)

3.2. The secondary adaptation follows similarities of meaning (Haugen, 1969, p. 441) and gender is assigned by means of formal marks in the morphological system of the borrowing language. In this stage gender is determined by: a) natural gender, or b) contamination. In the borrowing language it is formally marked by adjectival suffixes denoting gender and is applied to the assignment of feminine gender. Since in S—C feminine gender is marked by the suffix *-a*,[5] the formal sign determining feminine gender of English loanwords, is the ending *-a*. This ending is used to mark gender on the basis of both *natural gender:*

E girl	>	SC girl-*a*, gerl-*a*
stewardes	>	stjuardes-*a*

and through *contamination:*

E bowl	>	S—C bol-*a* (association based on the meaning of *zdjela*)
jungle	>	džungl-*a* (association based on the meaning of *pra/šuma*)
farm	>	farm-*a* (association based on the meaning of *zemlja, kuća*)[6]

[5] A great majority of feminine nouns end in *-a;* only a limited number of nouns ending in a consonant are of feminine gender.

[6] For more examples see: Filipović, R. 1971, p. 125—128.

4.1. VERS. The adaptation of the citation form of English *loanwords — verbs* in S—C is done on the basis of complete transmorphemization since verbs in S—C have their citation form — the infinitive — formed by using the adapted form of the loanword as the stem and the infinitive suffix *-a-* (which can extend into: *-ava-, -iva-, -ova-, -ira-, -isa-*) and the infinitive formant *-ti.*

E box	SC boks-a-ti, boks-ova-ti
dock	dok-ov-a-ti
interview	intervju-ir-a-ti
	intervju-is-a-ti[7]

4.2. The morphological category of verbal aspect can be properly analysed only by means of the new method, the two-concept approach: primary and secondary. In primary adaptation English *loanwords — verbs* acquire a limited ability of expressing the category of verbal aspect. When morphologically integrated through complete transmorphemization they join three groups of S—C verbs: a) the group of verbs denoting a perfective aspect; b) the group of verbs denoting an imperfective aspect; and c) a very small group of S—C verbs expressing both perfective and imperfective aspects depending on the context, known as bi-aspectual.

a) *Perfective aspect*

E knock-out	>	SC nokautirati
start		startati

b) *Imperfective aspect*

E train	>	SC trenirati
mix	>	miksati

c) *Bi-aspectual verbs*

E bluff	>	SC blefirati
test	>	testirati

4.3. The group of bi-aspectual verbs in SC is going to disappear very soon since the great majority of SC verbs express the

[7] For more examples see: Filipović, R. 1971, p. 128—133.

verbal category of aspect by a formal change using: a) a prefix, b) an infix, or c) a root change.

Imperfective	*Perferctive*
a) čitati (read)	— pro-čitati (finish reading)
b) pritiskati (keep on pressing)	— pritisnuti (press)
c) skakati (keep on jumping)	— skočiti (jump)

In secondary adaptation[8] all English *loanwords — verbs* closely follow the native S—C verbs and the category of verbal aspect is determined and marked by the method applied in Serbo-Croatian, most often using a prefix. Thus the main difference between primary and secondary adaptation is that in the former verbs are aspectually unmarked, while in the latter aspect is formally marked.

Imperfective	*Perferctive*
trenirati	— is-trenirati
miksati	— iz-miksati
šutati	— šut-nu-ti

4.4. In this way English *loanwords — verbs* (parallely to the native SC verbs) may follow the tendency of SC verbs to give up their bi-aspectual characteristic and to express imperfective and perfective aspect by formal differences only. The result of this would be that the primarily adapted English *loanwords — verbs* express only one of the two aspects. When the need comes to express the other aspect, the verb undergoes a formal change, i. e. it takes on a prefix.

Imperfective	*Perfective*
blefirati	— iz-blefirati, od-blefirati, za-blefirati
testirati	— is-testirati

[8] By its definition (See: Filipović, R. 1977c) secondary adaptation is an additional process of adaptation which begins after the loanword has been integrated into a new system and begins to behave like any other native word. It shows additional processes of adaptation, i.e. changes typical for native words in the borrowing language.

5.1. ADJECTIVES. The analysis of morphemic integration of adjectives also requires our new method of two stages: primary and secondary adaptation. According to E. Haugen (1956, p. 57, § 3.5.3) "adjectives are accepted as adjectives". More recently E. A. Moravcsik (1975, p. 20) stated that "adjectives are borrowed as monomorphemic constituents" and that it is not true that "adjectives should be borrowed as nouns and then adjectivalized within the borrowing language". The above statements cannot be applied to all languages: the results of the analysis of English *loanwords — adjectives* in SC are not in agreement with them.

5.2. Our corpus shows that English adjectives are very seldom transferred into SC as adjectives. There are only three commonly used English adjectives whose citation form was fixed by zero transmorphemization and whose adjectival characteristics were partly regulated through primary adaptation. Their citation form does not contradict the citation form of SC adjectives,

E fair	SC fer (cf. with dobar)
fit	fit (cf. with krut)
groggy	grogi (cf. with novi)

Through primary adaptation, they have not yet been integrated into the SC morphological system of adjectives. On the contrary, they have kept most morphological features of English adjectives; this means that they are still in the compromise replica form. They are not assigned gender,[9] they do not distinguish definite and indefinite forms,[10] and they

[9] *English loanword adjective* — *SC native adjective*
Ivan je fer igrač — Ivan je dobar igrač
(Ivan is a fair player)
Ivana je fer igračica — Ivana je dobra igračica
(Joan is a fair player)
Igra je bila fer — Vrijeme je bilo dobro
(It was a fair game)
In native SC adjectives the category of gender is fully marked by suffixes: masc. = Ø, fem. = *a*, neut. = *o*.

[10] The definite form is marked in the masculine singular by adding a suffix *-i* to the indefinite form, marked by Ø suffix.
Indefinite form: dobar čovjek = a good man
Definite form: dobri čovjek = the good man

are not given inflexions[11] (in singular and plural) to fit the system of declension of adjectives in SC.

5.3. All other English *loanwords — adjectives* go through secondary adaptation and are derived from English *loanwords — nouns* which were previously integrated morphologically into the system of nouns in SC. That was done by applying: a) any type of transmorphemization to get their citation form in SC, and b) primary and secondary adaptation to fix their morphological categories. Since SC adjectives are formed from nouns by adding adjectival suffixes, all English *loanwords — nouns* can be used to form adjectives in the same way. Thus, in SC, through this type of secondary adaptation, we get an almost unlimited number of English *loanwords — adjectives.*

Three main adjectival suffixes used in this function are:

	Native adjectives	*Loanwords-adjectives*
a) *-ski*	brat-ski	bar-ski, bokser-ski, film-ski, klup-ski, lord-ski, gangster-ski, spiker-ski
b) *-ov*	brat-ov	bokser-ov, gangster-ov spiker-ov, lord-ov
c) *-an*	glad-an	folklor-an, standard-an

[11]

SERBO-CROATIAN

Native words ← Masculine gender → Loanwords						
		adjective		*substantive*	*adjective*	*substantive*
		indefinite	*definite*	——	—	——
sg	N	dob(a)r-Ø	dobr-i	igrač-Ø	fer	igrač-Ø
	G	dobr-a	dobr-oga	igrač-a	fer	igrač-a
	D	dobr-u	dobr-omu	igrač-u	fer	igrač-u
	A	dobr-a	dobr-oga	igrač-a	fer	igrač-a
	V	dobr-i	dobr-i	igrač-u	fer	igrač-u
	L	dobr-u	dobr-omu	igrač-u	fer	igrač-u
	I	dobr-im	dobr-im	igrač-em	fer	igrač-em
pl	N	dobr-i		igrač-i	fer	igrač-i
	G	dobr-ih		igrač-a	fer	igrač-a
	D	dobr-im		igrač-ima	fer	igrač-ima
	A	dobr-e		igrač-e	fer	igrač-e
	V	dobr-i		igrač-i	fer	igrač-i
	L	dobr-im		igrač-ima	fer	igrač-ima
	I	dobr-im		igrač-ima	fer	igrač-ima

Adjectives formed in this way express all characteristics of SC native adjectives. All three groups take on inflexions and follow the system of adjective declension. Their gender, case and number are determined by the nouns they qualify. The third group of *loanwords — adjectives* ending in *-an* distinguisches a definite from an indefinite form for the singular number of masculine gender.

filmsk*i* čovjek	spikerov glas	standard-a-*n* (-n*i*) opis
filmsk*a* zvijezda	spikerov*a* žena	standardn*a* predstava
filmsk*o* naselje	spikerov*o* dijete	standardn*o* kupalište

5.4. The analysis of phonemic integration of adjectives proves that there are two ways of adapting English *loanwords — adjectives* in SC (and not only in SC but also in some other European languages we have studided in the "The English Element in European Languages" project). The first is illustrated by a small number of English adjectives which are not completely adapted morphologically and are kept in the form of a compromise replica.[12]

A second and much larger group of English *loanwords — adjectives* is derived from nouns which, having gone through primary adaptation in the process of borrowing in order to be integrated into the system of nouns, then go through secondary adaptation and behave like any other native noun in forming adjectives. What this analysis shows is that E. Haugen's statement does not completely comply with our results, and that E. A. Moravcsik's throughts about the way in which adjectives as loanwords are formed in the borrowing language are not true, as our corpus (in many languages) has proved just the opposite: that "adjectives should be borrowed as nouns and then adjectivalized within the borrowing language". The former process corresponds to primary and the latter to secondary adaptation.

6. CONCLUSION. The analysis of the adaptation of loanwords on the morphological level shows that morphemic integration of loan material is the result of two features: a) transmorphemization which regulates the citation form, and b) primary and secondary adaptations which determine the morphological categories of loanwords.

[12] They are, however, completely adapted on the phonological level according to the rules of transphonemization (Filipović, 1981).

REFERENCES

FILIPOVIĆ, Rudolf (1961), "The Morphological adaptation of English Loanwords in Serbo-Croatian", *Studia Romanica et Anglica Zagrabiensia* 11, Zagreb, 91—103.

(1971), *Kontakt jezika u teoriji i praksi.* (Language Contacts in Theory and Practice.), Zagreb, XVI + 142 pp.

(1972), "Some Problems in Studying the English Element in European Languages", *Studia Anglica Poznaniensia,* vol. 4, nos. 1—2, Poznań, 141—158.

(1974), "A Contribution to the Method of Studying Anglicisms in European Languages", *SRAZ* 37, Zagreb, 135—148.

(1977a), "Some Basic Principles of Languages in Contact Reinterpreted", *SRAZ* 43, Zagreb, 157—166.

(1977b), "English Words in European Mouths and Minds", *Folia Linguistica,* X 3—4, The Hague, 195—206.

(1977c), "Primary and Secondary Adaptation of Loan-Words", *Wiener Slavistiches Jahrbuch,* XXIII, Wien, 116—125.

(1980), "Transmorphemization: Substitution on the Morphological Level Reinterpreted", *SRAZ,* XXV, 1—2, Zagreb, 1—8.

(1981), "Transphonemization: Substitution on the Phonological Level Reinterpreted", *Europäische Mehrsprächigkeit,* Niemeyer, Tübingen, 125—133.

HAUGEN, Einar (1956), *Bilingualism in the Americas: A Bibliographical and Research Guide,* American Dialect Society, University of Alabama Press.

(1969), *The Norwegian Language in America,* Indiana University Press.

MORAVCSIK, Edith A. (1975), "Verb borrowing", *Wiener linguistische Gazette,* Heft 8, 3—31.

WEINREICH, Uriel (1966), *Languages in Contact,* Mouton, The Hague.

MORFOLOŠKE KATEGORIJE U LINGVISTIČKOM POSUĐIVANJU

U procesu lingvističkog posuđivanja kad se *model* (strana riječ jezika davaoca) adaptira u *repliku* (posuđenica u jeziku primaocu) na morfološkoj razini adaptacije analiziramo najprije osnovni oblik posuđenice, tj. kako se formira u sustavu jezika primaoca. Istovremeno određujemo kojoj vrsti riječi pripada posuđenica.

Autor primijenjuje dva nova pojma koja je uveo u svoju analizu: primarna adaptacija i sekundarna adaptacija. U prvoj posuđenica ostaje ista vrsta riječi, a u drugoj posuđenica prelazi u drugu vrstu riječi. Promjene koje se javljaju u toku adaptacije klasificiraju se prema toj podjeli.

Analiza osnovnog oblika vrši se prema tipovima transmorfemizacije (nulta, kompromisna i potpuna), a od morfoloških kategorija autor analizira adaptaciju roda kod imenica, glagolski aspekt u adaptaciji glagola i način adaptacije pridjeva koji se razlikuje od adaptacije imenica i glagola.