# The adaptation of Romanian loanwords from Turkish and French

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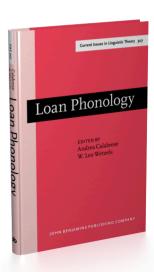
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# The adaptation of Romanian loanwords from Turkish and French\*

Michael L. Friesner University of Pennsylvania

This paper examines several factors affecting loanword adaptation, using a data set of Romanian loanwords from Turkish and French. After exploring the position of loanwords in the lexicon and the nature of the two contact situations, the author considers relevant social, morphological, and phonological factors. First is the difference in the loanwords' semantic domains and their motivations for being borrowed. Next, the author introduces the morphophonological factors considered—stress, desinence class, and gender assignment—and discusses their behavior in the core vocabulary and previous relevant studies. Subsequently, the author examines the loanword data in detail, comparing and contrasting the Turkish- and French-origin loanwords. The author concludes that one must consider different modules of the language—the phonology and the morphology—and that only by contrasting borrowings from different languages into the same language can one determine the relative effect of internal and external factors on the outcome of contact.

#### 1. Introduction

The issue of the nativization of loanwords has been discussed in terms of a 'core-periphery' organization of the lexicon (cf. Itô & Mester 1995a,b). Such a model suggests that peripheral lexical items may be exceptional with regard to certain constraints of the recipient language. The typical path for a foreign borrowing is thus to enter the language in the periphery and then optionally to become fully or partially nativized, usually by changing its surface form to obey the previously violated constraints.

Loanword adaptation is frequently studied in terms of the phonology alone. In this paper, I consider themes that examine more broadly the question of how

<sup>\*</sup>I would like to thank Ioana Chitoran, Luminita Dirna, Cristian Iscrulescu, Ron Kim, Oya Nuzumlali, Zeynep Oktay, Zeynep Oz, Lori Repetti, Gillian Sankoff, and Beatrice Santorini for their help at various stages of this project, as well as the two anonymous reviewers.

loanwords are nativized. What are the internal and external factors that influence loanword adaptation patterns, and how do we assess the relative importance of these factors? How does the interaction between morphology and phonology come into play in loanword adaptation?

In considering the particular case of Romanian, I examine the effects of contact with French and Turkish, drawing from a collection of commonly used loanwords from these two languages, which I compiled. In particular, I address to what extent the differences in adaptation patterns of loanwords from Turkish and those from French can be explained by external, as opposed to internal, factors. The nature and phonological shape of these borrowings can thus be explained in large part by phonological and morphological considerations, but these must be coupled with an examination of the type of contact involved.

### 1.1 Loanwords and the lexicon

As mentioned earlier, Itô & Mester's (1995a,b) model of a 'core-periphery' organization of the lexicon suggests that peripheral items are allowed to violate constraints that are active in the core. Peripheral items include proper names, specialized vocabulary, onomatopoetic forms, and, most notably, words of foreign origin. The typical path for a foreign borrowing is thus to enter the language in the periphery. These borrowings may then eventually become part of the core, thus coming to obey all the constraints of the language, or they may remain in the periphery, despite being partially nativized. A fully nativized core lexical item is not perceived as foreign or exceptional by native speakers.

In Optimality Theory, this change in surface form is accounted for by the reranking of Faithfulness constraints (cf. Davidson & Noyer 1997). For peripheral items, if the relevant Faithfulness constraints are ranked above the relevant Markedness constraints, then the result is more faithful to the input from the source language.

Some languages presumably have a more distinctly stratified lexicon than others. The prime example used by Itô & Mester (1995a,b) is that of Japanese, which, due to its history, has distinct strata of the lexicon that correspond to native Japanese vocabulary, early Chinese loans ('Sino-Japanese'), and more recent loans that can vary in degree of nativization. These authors demonstrate that the strata can be distinguished by specific constraints, which all apply to the core vocabulary. In subsequent peripheral layers, the constraints are increasingly allowed to be violated, as they are ranked lower than Faithfulness constraints. This model is demonstrated in Figure 1.

The Romanian lexicon can be described as having a similar core-periphery structure to that of Japanese. While Romanian developed from Latin, its core

vocabulary contains a large percentage of words of Slavic origin, as well as other early borrowings from Turkish, Hungarian, German, Greek, and Albanian, among other languages (Chitoran 2001). These were the earliest languages with which Romanian was in contact. In particular, the Slavic contact yielded borrowings from the fifth century CE onwards (Petrucci 1999). Close (1974), claims that this early contact resulted in the borrowing of lexical items that had been fully assimilated by the sixteenth century. Maneca (1966) shows that borrowing accounts for the finding that the Latin core constitutes only about 35% of the lexicon of modern Romanian

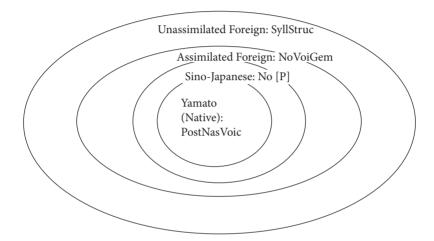


Figure 1. Itô & Mester's (1995b) core-periphery model of the Japanese lexicon

Based on the distinct waves of contact described above, Chitoran (2001:31–32) suggests the structure of the Romanian lexicon shown in (1).

(1) *native core vocabulary:* Latinate vocabulary

> other core vocabulary: Slavic and other early loans

partly-assimilated vocabulary: French, Italian, Greek, and Turkish loans

from the 14th to 19th centuries

unassimilated vocabulary: recent English loans

This paper focuses on Chitoran's (2001) category of partially assimilated loans and suggests that this category may need to be further subdivided.

## The nature of the two contact situations

Turkish contact with Romanian was at its height between the fourteenth and eighteenth centuries (Close 1974; Chitoran 2001). This contact was due primarily to the expansion of the geographic area of Turkish control. Many of the loanwords from Turkish from this period have fallen out of use in modern Romanian, a fact which was facilitated by conscious efforts of Romanian intellectuals to eliminate Turkish 'impurities' from the Romanian lexicon. This amazingly successful corpus planning effort constituted an assertion of independence. The Turkish words examined here are among the few that have remained in use subsequent to this 'purification' process.

Contact with French was at its height during the nineteenth century. This contact was of a very different nature. French was the language of intellectualism and sophistication. Borrowing from French, as well as Italian, served as a way to adopt Latinate lexical items to replace earlier Turkish borrowings. This was a deliberate way to enrich the vocabulary of Romanian with words consistent with its Romance roots. Some French loanwords were adopted and adapted from writing, in a conscious manner, and were initially used primarily within the upper tiers of society.

# 1.3 The data set

The data considered here come from a compilation of Romanian loanwords from Turkish and French. Only those words which are still in use today were included from a much larger set. The exclusions were intended to allow verification of actual pronunciation, as prescriptive pronunciations of loanwords often differ from their most frequent pronunciation by native speakers. Words of unclear origin were also excluded from the data set, as were clear neologisms and learned forms, as much as possible. Other words which have been excluded include so-called 'international loans', which may have several sources, all of which may have interacted to produce the Romanian surface form (Close 1974:38–39). The analysis here is thus based on the eighty-five relatively frequently occurring forms from the data set that remain after these exclusions.

An additional concern is the possible effect of orthography. While this is a legitimate concern, the phonological features examined here have been selected in part to minimize the possibility of such effects. These features—stress, desinence class assignment, and gender assignment—are less likely to exhibit orthographic effects than segmental features.

<sup>1.</sup> Romanian data are drawn from Chitoran (2001), Close (1974), Sala (1976), and Suciu (1992). Only borrowings cited in the source material which were familiar to two native speaker informants were included for analysis.

<sup>2.</sup> It is often difficult to distinguish words that came into Romanian from French and those that were borrowed from Italian. I thus excluded words where adaptation of the French and Italian form would likely have yielded the same result.

# Semantic domains of loanwords

The differences in nature of contact are manifested in the semantic domains of the loanwords from the data set and the type of semantic shift they undergo. Many authors discuss the various motivations for borrowing (Weinreich 1968; Haugen 1969; Poplack, Sankoff & Miller 1988; inter alia). These include the need to fill a lexical gap, the desire to adopt a prestige form, the desire for a more localized term or one that carries covert prestige, and the usefulness of a more succint or morphologically simpler way to express a concept. However, depending on the contact situation, the relative importance of each of these possible factors may differ. Attitudes towards the source language and its speakers, influenced by factors such as the nature of the contact situation and cultural prejudices, as well as which members of the community are likely to adopt the borrowings first, affect the type of semantic shift that tends to occur with loanwords.

Loanwords in the data set usually fall within the expected semantic domains for loanwords: food, drink, household items, and materials. Some examples of such loanwords from the data set are given in (2).

(2)	a.	Turk.	t∫órba 'soup'	>	Rom.	t∫órbə
	b.	Turk.	kahvé 'coffee'	>	Rom.	kafęá
	c.	Fren.	pyré 'purée'	>	Rom.	pjuré/piréw
	d.	Turk.	kanepé 'couch'	>	Rom.	kanapeá
	e.	Turk.	basmá 'cloth'	>	Rom.	basmá 'scarf'
	f.	Turk.	perdé 'curtain'	>	Rom.	perdeá
	g.	Fren.	vwál 'veil'	>	Rom.	vwál
	h.	Fren.	zaluzí 'Venetian blind'	>	Rom.	zaluz <u>ę</u> á

Even within this realm, words of Turkish origin tend to refer to more commonplace objects, while the French words have more specific, high-end uses.

Other semantic domains reflect more clearly the differences in nature of contact. Turkish loans tend to refer to aspects of the government and the military, as shown in (3). This is not unexpected given that for a time these bodies were controlled by the Turks. The sources show that there were many more words within these domains that are no longer used.

```
(3)
          Turk.
                   ayá 'government official' > Rom.
                                                       ágə
     h.
          Turk.
                   pa∫á 'general'
                                            > Rom.
                                                       páſə
```

French loans, on the other hand, tend to refer to aspects of high society, as in (4).

```
(4)
          Fren.
                  budwár 'boudoir'
                                                  budwár
                                          Rom.
     b.
          Fren.
                  lɔrnét 'opera glasses' >
                                          Rom.
                                                  lornéta
                  barɔ̃ 'baron'
                                          Rom.
                                                  barón
          Fren.
```

While many of the words were adopted out of necessity, to fill a semantic gap, others exist alongside a native word. In such instances, we expect some kind of differentiation between the two lexical items according to register or connotation. In fact, the French loans tend to be attributed a positive connotation, while the Turkish loans take on a negative connotation. Some examples are given in (5).

```
(5)
          Fren.
                 dam 'lady'
                                            Rom.
                                                    dáma
     a.
                 bal 'dance/ball'
                                                    bál
     b.
         Fren.
                                            Rom.
          Fren.
                 balkɔ̃ 'balcony'
                                                    balkón
                                        > Rom.
     c.
     d.
         Turk.
                 jaymá 'loot/pillaging'
                                        > Rom.
                                                    iámə
         Turk.
                 belá 'trouble'
     e.
                                        > Rom.
                                                    beleá
          Turk.
                 kelepír 'bad bargain'
                                                    kilipír
                                        > Rom.
```

In the most extreme cases, a semantic shift occurs in the direction of linguistic attitudes. These words' trajectories reflect speakers' attitudes toward the source language and culture. The most striking examples involve the pejorative meaning shift of several of the Turkish loanwords, such as those shown in (6).

```
(6)
         Turk. hajmaná 'wandering'
                                      > Rom. hajmaná 'tramp'
               mahallé 'neighborhood' > Rom. mahalá 'slum'
```

# Stress and gender desinence

# Stress and gender desinence in the native vocabulary

In the native vocabulary of Romanian, stress can surface anywhere from the final syllable to the preantepenultimate. As Petrucci (1999:39-41) explains, the quantity sensitive system that existed in Latin was gradually lost in Romanian due to processes of vowel shortening and loss of unstressed syllables. Looking at the internal structure of words in modern Romanian, stress assignment can be said to follow two patterns: stem-penultimate or stem-final (cf. Chitoran 2001; Friesner 2006). Under this analysis, gender desinences and certain suffixes are excluded from the domain of stress, thus yielding the other surface stress patterns. Some examples are given in (7).

```
[mə.seá] 'tooth'
(7)
           [kə.már]ə 'pantry'
                                  b.
                                                                [ma.gérn]its-ə 'hovel'
      d.
           [ká.mer]ə 'room'
                                  e.
                                      [rúp-e] 'he tears'
                                                                [vé.ver]its-ə 'squirrel'
```

Desinence vowels generally correspond to a specific gender. Following Harris (1991) and Repetti (2003, 2006), I treat these desinences as declension classes that are assigned a certain gender.<sup>3</sup> Chitoran (2001) explains that nearly all native nouns in Romanian end in one of the desinence vowels.

I sometimes refer to these as 'gender desinences' for the sake of simplicity.

As shown in (8), feminine nouns generally end in -a or -e.

a kás-a 'house' b kárt-e 'book'

Masculine/neuter nouns<sup>4</sup> usually end in -e or -u underlyingly. Underlying -u is usually deleted, except when the result would be ill-formed, but its presence in consonant-final masculine nouns is convincingly justified by Chitoran (2001:37–39) and Iscrulescu (2003). This final -u may also sometimes be realized as -w, after a vowel. Some examples are given in (9).

a. múnt-e 'mountain' (9)b. bívol(-u) 'buffalo' kúpl-u 'couple' d. karó-w 'square'

Almost all native vocabulary bears a desinence vowel, but there are about a dozen native words descended from Latin which lack a desinence vowel (10).

b. məseá 'tooth' c. purtseá 'female pig' (10)steá 'star'

Given the rarity of words lacking a gender desinence vowel, the examples in (10) seem to reflect a marked pattern. However, such words may serve as a basis for analogy in loanword adaptation.

Petrucci (1999) shows that early Slavic loans were assigned a desinence class, but they retained the stress position from the source with occasional concomitant consonant deletion. The only exception to this pattern was final-stress words, which underwent a shift in stress, as shown in (11).

Slavic slugá 'servant' > Rom. slúgə (11)Slavic xraná 'food' > Rom. hrána

This shift allowed the Slavic-origin words to fall into one of the native patterns of stem-final or stem-penultimate stress.

# Studies of stress and gender desinence in loanwords

Stress assignment in loanwords has been studied in a number of languages, including English (Svensson 2001), Huave (Davidson & Noyer 1997), Kyungsang Korean (Kentowicz & Sohn 2001), Thai (Kenstowicz & Suchato 2006), and Fijian (Kenstowicz 2007), as well as cross-linguistically by Peperkamp & Dupoux (2002). These studies generally suggest two possible outcomes for loanword stress assignment: maintenance of stress position from the source language or adaptation to the unmarked stress position of the recipient language. In terms of a core-periphery model, these

<sup>&#</sup>x27;Neuter' nouns behave like masculine nouns in the singular and feminine nouns in the plural. The status of 'neuter' as a separate gender in Romanian is under debate. Here, where only singular forms are considered, these nouns are simply referred to as 'masculine'.

two possibilites could be restated as non-adaptation and full adaptation. These outcomes can be accounted for within Optimality Theory through the reranking of faith(stress) relative to the relevant markedness constraint for stress in the recipient language.

An impressionistic look at the data from a number of language pairs paints a more complex picture. For example, Santorini (p.c.) notes that some trisyllabic loanwords from French into Middle English surface with penultimate stress. This constitutes neither non-adaptation, which would yield final stress, nor full adaptation, which would yield initial stress. Thus, there must be some other possible intervening factors. These may include the presence of secondary stress in the source form, analogy with other lexical items in the native vocabulary of the recipient language, or the need for loanwords to adhere to morphological requirements of the recipient language.

Gender assignment in loanwords has not been examined as extensively as stress. The existing studies addressing this issue (e.g., Fisiak 1975; Poplack, Pousada & Sankoff 1982; Thornton 2003) indicate a complex interplay of factors, including semantic effects, various types of analogy, and orthographic influences. The interaction between such morphological factors and phonological factors in loanword adaptation is rarely considered (but note Repetti 2003, 2006, this volume). Questions related to such interactions are relevant to the analysis of the data presented here.

# 4. Stress and desinence vowels in the Turkish loanwords

# 4.1 Gender desinence in the Turkish loans

In considering the gender assignment of Turkish loanwords, it is important to note that nouns in Turkish do not carry gender. Thus, Turkish loans in Romanian are necessarily assigned to a declension class without the influence of the grammatical gender from the source language. As a result, desinence class assignment is made based primarily on phonological form. Interestingly, natural gender does not seem to play a role in desinence class assignment (cf. páʃə 'general'), although it does affect gender assignment as manifest in adjective agreement, for example. There are some examples of masculine nouns with a feminine desinence vowel in the native vocabulary, as well.

As shown in (12), consonant-final nouns are assigned masculine gender and are treated as if they have undergone the usual -u deletion that occurs with masculine nouns.

```
kelepír 'bad bargain'
(12)
           Turk.
                                              Rom. kilipír
                  gavúr 'foreigner/infidel' >
                                              Rom. gjaúr
```

Vowel-final nouns in the data set are assigned to a feminine gender declension in Romanian, as shown in (13). All such examples in the data set end in /a/ or /e/ in Turkish, except for one that ends in /y/. More specifically, Turkish final /a/ is generally adapted either as stressed /á/ or else as /ə/ with concomitant stress shift. Turkish /e/, on the other hand, is generally adapted as /eá/. Turkish /e/-final words are not assigned to the -e feminine gender desinence. This seems to constitute a closed declension class.

```
(13)
      а
           Turk. sobá 'stove'
                                     > Rom
                                                sóba
          Turk. basmá 'cloth'
                                     > Rom.
                                                basmá 'scarf'
      b.
          Turk. kadifé 'velvet'
                                     > Rom.
                                                katifeá
      c.
           Turk. gøtyrý 'price/lump' > Rom.
                                                gjóturə 'a lot'
```

The difference observed in the two adaptation patterns for Turkish final stressed /a/ seems to reflect a tendency for /a/ to be adapted as the /ə/ desinence in older borrowings, and for /a/ to be adapted as final stressed /a/ in newer borrowings. This latter pattern is closer to the Turkish pronunciation, but it constitutes a category of words not attested in the native vocabulary of Romanian.

This patterning recalls Haugen's (1950) analysis of American Norwegian in contact with English. Haugen found that later borrowing generations allowed loanwords to remain less adapted because there was greater familiarity with input from the source language that followed this nonnative pattern. Thus, the pattern seemed less exceptional to the native speakers of the recipient language. However, some counterevidence to this explanation comes from the existence of words which have recently changed in form while being nativized to a greater degree, such as the example given in (14).

```
Turk. pasá 'general' > Rom. pasá > newer Rom. pásə
(14)
```

While there are very few exceptions to the pattern of /a/ being adapted as /ə/ or /a/ and /e/ as /ea/, some do exist, as given in (15).

```
Turk. belá 'trouble' > Rom. beleá
(15)
      b.
          Turk. kulé 'tower' >
                                Rom, kúla
```

These exceptions (only three in the data set) could be the result of imperfect learning, where the Turkish form is misconstrued. Alternatively, these frequent words may in some cases be perceived as more native, and thus they are assigned to a more native-like pattern than would be expected. Final stressed /ea/, for example, has a basis in the native vocabulary, while /á/ does not.

#### Stress in the Turkish loans 4.2

In the native vocabulary, Turkish stress almost always falls on the final syllable. Two exceptions to this tendency are place names and certain lexical items, which are generally described in the literature to be lexically marked (Underhill 1976:18-19). Other non-final surface stress is explainable in terms of Turkish morphophonology.

The stress position from Turkish is not always maintained in loanword adaptation. This outcome seems to suggest that the need for an overt gender desinence marker can override faithfulness to input stress. In Optimality Theory, this finding can be captured through the ranking of a constraint such as REALIZEмогрнеме(gender) (cf. Walker 2000) above FAITH(stress).<sup>5</sup>

However, in the cases where stress from Turkish is maintained without the addition of a desinence vowel, it may be that the existence of a few native words with final stress that lack a desinence vowel (ending in /ea/) serves as a basis of analogy. If this is so, this would explain the slight preference for adaptations in / ea/, an ending attested in the native vocabulary.

Nonetheless, I do not argue that these words should be analyzed identically to the exceptional final-stress core vocabulary items. The borrowings still seem peripheral (cf. Itô & Mester 1995a,b) in a way that the native words may not, in that they are still often known to be borrowed items. If they were joining the exceptional native category, the prediction would be that they would remain exceptions even when being nativized to the point of being imperceptibly foreign in origin. Instead, the examples of such words that have undergone further nativization indicate that they change in form to adhere to the dominant core pattern, with a desinence vowel (as in (14)). The analysis suggested here for the final-stress words in Romanian is thus similar to that I proposed in Friesner (2001) for 'h aspiré' words in French. These are an exceptional class of consonant-like vowel-initial words, usually with an initial h in the orthography. This is the category to which most recent h-initial loans are assigned, but there is a basis in the core vocabulary, descending from either Latin f-initial words or early Germanic loans beginning with h. In Friesner (2001), I found that when these words were perceived as native (e.g., for many speakers, handicapé 'handicapped', hovercraft, and hamburger), they were likely to be treated as unexceptional, vowel-initial words. Native exceptional words, on the other hand, are somehow lexically marked to allow the exceptional

As one reviewer points out, other constraints must rank even higher to account for the deletion of -u that occurs in native masculine forms ending in a consonant. As a full Optimality Theory analysis is beyond the scope of this paper, I will leave consideration of the exact formalism needed to account for these data to future work.

behavior, thus constituting an island that otherwise adheres to the core constraints of the language. The model to account for this behavior is given in Figure 2, from Friesner (2001).

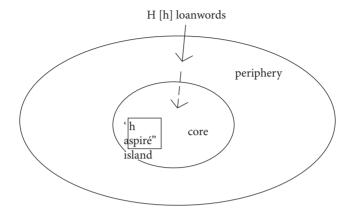


Figure 2. Friesner (2001) on the integration of 'h aspiré' loanwords in the French lexicon

Returning to the data, I find that consonant-final words are not a problem for stress assignment: they have final stress in Turkish as well as in Romanian, as shown in (16).

Turk. susám 'sesame' > Rom.

Vowel-final words, on the other hand, must choose between maintenance of stress (17a,b) and expression of gender desinence (17c,d).

- (17)Turk. pará 'money' > Rom. pará Turk. belá 'trouble' > Rom. beleá Turk. pasá 'general' > Rom. pásə
  - Turk, kulé 'tower' > Rom, kúla

After these considerations, only one example from the data remains unexplained, given in (18). Under the current assumptions, if the final vowel is adapted as a desinence vowel, the stress should move to the last syllable within the domain of stress. Instead, the outcome follows neither of the usual patterns observed of stress maintenance or stress shift to the nearest syllable.

Turk. gøtyrý 'price/lump' > Rom. gjóturə 'a lot'

I offer only a speculative explanation for this result: it is possible that this outcome reflects secondary stress in the input from Turkish, which is maintained in Romanian as primary stress. I do not, however, purport to make any claims about the stress system of Turkish.

# 5. Stress and desinence vowels in the French loanwords

One difference between French and Turkish that bears on gender assignment is that French nouns carry gender. French gender is usually maintained in the Romanian loan. In some cases, this gender assignment fits in nicely with the Romanian desinence classes. In other cases, more complications arise.

Easiest to adapt are French consonant-final nouns. In the feminine form, these nouns, which are often spelled with a final e, are sometimes pronounced with a final schwa in French. This equates nicely with the Romanian feminine desinence (19a,b). Consonant-final nouns also fit easily into the class of masculine nouns with underlying final -u, which does not surface (19c).

For vowel-final masculine nouns, the word's form is modified. This modification allows the maintenance of both stress position and gender desinence. Exceptionally, these nouns add a -u post-vocalically, which is realized as /w/. In the native vocabulary, the -u desinence generally follows a consonant. A couple of examples are given in (20).

```
(20) a. Fren. pari /parí/ 'bet' > Rom. paríw b. Fren. héros /eró/ 'hero' > Rom. erów
```

The disparity here between French and Turkish cannot be explained by the time of borrowing, since earlier Turkish borrowings were sometimes not nativized. Instead, it seems likely that the difference is due both to a difference in the nature of contact and to linguistic differences between French and Turkish as compared to Romanian. French words already have a grammatical gender, which the initial borrowers may have been aware of and attempted to respect. The agents of borrowing from French were usually scholars, who would have learned French grammar formally and have a heightened awareness of words' gender because of having had to learn this specifically. There was also a need to have these words fit into a native pattern, so that they would seem more 'authentic', since French words were often borrowed out of a conscious effort to 're-Latinize' the language.

The few exceptions to the pattern in which French gender matches up with Romanian gender could reflect cases in which borrowers simply got the gender wrong. In these instances, such as those given in (21), the phonological form is likely to blame.

```
(21) a. Fren. fantôme /fãtóm(ə)/ (MASC.) 'ghost' > Rom. fantômə (FEM.) b. Fren. tournée /turné/ (FEM.) 'tour' > Rom. turnéw (MASC.)
```

There are only a few other minor problems in the data set left to explain. First of all, there are a few cases in which final /u/ in French is maintained as a desinence within the domain of stress, while desinence vowels are generally excluded from this domain. Some examples are given in (22). This result seems to reflect a strong prohibition throughout the Romanian language against the sequence \*/uw/.

```
Fren. acajou /akazú/ 'mahogany'
(22)
                                                  > Rom. akazú
          Fren. rendez-vous /rãdevú/ 'appointment' > Rom. randevú
```

There is one instance (23) in which final stressed /e/ is allowed, but this form varies with another, less exceptional form. In this case, according to Chitoran (p.c.), the form with final stressed /e/ is declined as if it contained final /ew/.

```
a. Fren. purée /pvré/ 'purée' > Rom. piuré/piréw
```

Finally, words that end in -ie (pronounced /i/) in French are problematic for Romanian. If only pronunciation is considered, these should be masculine in Romanian, but in French they are always feminine. A number of creative solutions have been devised in order to maintain stress and give some native-like gender desinence to such words. Examples are given in (24).

```
Fren. jalousie /ʒaluzí/ 'Venetian blind'
(24)
                                                        Rom.
                                                                 zaluzeá
                   galanterie /galat(ə)rí/ 'gallantry'
       b.
                                                         Rom.
                                                                 galanteríe
```

In French, all words have final prominence, except that the optional final schwa is never stressed. In the Romanian loans, we observe little change in the position of stress in loanword adaptation. Unlike with the Turkish loanwords, maintenance of stress, in fact, takes precedence over maintenance of form, although in all cases a desinence vowel must still be present.

A possible formalism to account for the discrepancy between French and Turkish within Optimality Theory would be to rank DEP-IO below both REALIZE-MORPHEME(gender) and FAITH(stress) for this level of the vocabulary. This would capture the generalization that for French-origin loanwords, segment insertion is permissible in order to mark gender overtly. This also constitutes an allowable reranking of constraints for different strata of the lexicon under the assumptions of Davidson & Noyer (1997), since it requires only the reranking of a specific Faithfulness constraint.

Finally, examples such as (25) lend support for the stress pattern proposed here, in which desinence vowels fall outside the domain of stress. This example, the one preposition in the data set, exhibits final stress since, as a preposition, it does not require the addition of a desinence vowel.

```
Fren. vis-à-vis /vizaví/ 'vis-à-vis' > Rom.
(25)
```

# 6. Conclusions

In this paper, I have demonstrated that many different factors affect the phonological shape of loanwords. Morphological factors constitute one important aspect that must be considered. Social factors are also relevant considerations.

While orthographic effects may be present in loanword adaptation, as has been demonstrated by Vendelin & Peperkamp (2006), they do not necessarily impede analysis. For example, final orthographic consonants that are not pronounced in French are occasionally realized in the Romanian loans, some examples of which are given in (26). However, this effect has no bearing on stress or gender desinence.

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(26) a. Fren. blond /blɔ̃ / 'blond' > Rom. blond
b. Fren. boulevard /bul(ə)vár/ 'boulevard' > Rom. bulevárd
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The findings presented here imply that only by contrasting borrowings from different languages into the same language can the relative effect of internal and external factors on the outcome of contact be determined. For example, French has a gender system and Turkish does not; this seems to call for an internal explanation for differences in treatment of gender. On the other hand, French and Turkish both have final stress; differences in stress assignment in the Romanian loanwords thus suggest an external explanation. Similarly, the fact that native Romanian words almost always carry a desinence vowel suggests an external explanation for the fact that Turkish loans do not always have a desinence vowel (and thus remain more foreign-sounding), while French loans almost always do (in order to appear more native-like).

Thus, in order to get a full picture, we must look for explanations within a number of areas of the language. These include different modules, such as the phonology and the morphology, as well as different levels, including linguistic differences and external explanations such as orthography and social factors.

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