<u>مقاله کوتاه</u>

همخوان های ساکت در انگلیسی

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چکیـده

با این پیش فرض که املای معمولی انگلیسی قانونمند است، بررسی حاضر در صدد بود که بافت هایی را بیابد کـه در آن ها برخی از همخوانهای انگلیسی به صدا در نمی آیند. تعداد ۱۲ همخوان از این نوع مــورد مطالعـه قـرار گرفت. بافت های مربوط به آن ها شناسایی شد و قواعد لازم به صورت فرمول ارایه گردید. همچنین، کـاربرد آموزشـی قواعـد مزبور نیز مورد اشاره واقع شد.

Silent Consonants in English

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ABSTRACT

With the assumption that normal orthography is regular, the present study seeks to find rules that determine the contexts in which certain consonants occur but are not pronounced. Twelve such consonants are detected and the contexts in which they are mute are determined. Then the related rules are formulated and their pedagogical implications are suggested.

Key Words: 1. Pronunciation 2. Spelling 3. Mute consonants 4. Pronunciation rules 5. Silent letters.

1. Introduction

Time has now passed to consider the English orthography as irregular, that is, not rule-governed. Even examples such as **bough, cough, dough, rough,** and **through** in which the same spelling pattern represents different pronunciations can be said to be rule-governed (See Schane, 1970). Conventional spelling pattern is in fact closer to "the optimal phonological representation" than the "standard phonemic transcription" (Chomsky and Halle, 1968: 69).

Chomsky and Halle (1968) showed that the pronunciation of English words can be predicted by paying attention to the spelling of words. The pedagogical rules devised by Dickerson (1977, 1978, 1978a, 1981, 1982, 1985, 1989, 1989a) also revealed the regularity of the orthography. Yamini (1997) proclaimed the teachability of these regularities and the rules thereof.

Before these regularities were revealed, the general belief was that English spelling did not offer any clues to the pronunciation of words (See Lado and Fries, 1954; and Mackay, 1987). However, even at that time, there were attempts at finding pronunciation rules and teaching them to the students. (See, for example, Allen, 1954; Hill and Ure, 1962; Wijk, 1966).

2. Objectives of the Study

This study is an attempt at finding the contexts in which certain consonants are silent in British RP. The assumption is that the spelling pattern can be a good guide to the pronunciation of words. With this point in mind, an attempt is made to find and formulate rules that show the contexts in which certain consonant letters do not represent any sounds.

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3. Statement of the Problem

As writing is permanent, it does not change as rapidly as the sounds it represents. Most sounds undergo changes in spoken language, but the written form retains the old spelling pattern. This creates some discrepancy between the orthography and the spoken word, making the pronunciation of written words difficult for the foreign language learner. One such case exists in words that contain written symbols that no longer represent any sounds.

However, if one traces the pronunciation of words back to older times, one sees that the silent consonants of today were once pronounced fully. For example, <knight> used to be pronounced as [knɪxt] (See Jones, 1956: 213 for the transcription of fourteenth century <gh>), but now two of the consonant sounds are deleted. Yet, the spelling pattern includes enough information to signal the correct pronunciation of the word. It is this information that should be passed to the learner. To do this, one needs to know exactly at what contexts consonants are not pronounced, and how the spelling pattern and the morphology of the word may help one pronounce the word correctly.

4. The Study

4.1. Gemination in English

Before specific silent letters are considered, it must be noted that in modern English there is no gemination, that is to say when there are two consonants of the same type together, they do not represent two sounds (except in word boundaries). Only one of them is pronounced and the other is mute. This fact is referred to as consonant simplification in Chomsky and Halle (1968: 148) and is stated informally in the following way:

(1) C → ∅ / before an identical C

A look at the transcription of older texts reveals that the case was different in the past. Double consonants used to represent geminated sounds. (See Jones, 1956: 213). Therefore, there is a logic behind certain double consonant spellings. The fact that these spellings represent only one sound now should be brought to the consciousness of the language learners so that they do not try to pronounce double consonants as geminated sounds.

4.2. Silent Letters

Silent letters are mostly the ones that stand for stop sounds, [p, b, t, d, k, g], semiconsonants [l, n, r] and the semivowel [w]. The letter <c> should also be included among those representing stop sounds because it can stand for [k] as well. From among the combination of consonants, <gh> is usually silent.

If the syllable structures in English are studied, it becomes apparent that there are certain consonants that can cluster together. As a matter of fact, stop sounds are the ones that are present in most consonant clusters (See Gimson, 1962; Ladefoged, 1975; Fromkin and Rodman, 1988; Roach, 2000). But sounds do not combine with other sounds randomly. The combination takes place under certain constraints and in certain contexts the consonants become silent.

4.2.1. Silent <b>.: In the following examples, one can see the contexts in which <b> is mute and compare them with the contexts that signal a sounded <b>. (Column II examples are taken from Wijk, 1966: 115)

(2)   I   II
          obtain [əb'teɪn]   debt [det]
          subtract [səb'trækt]   doubt [daʊt]
          subtitle ['sʌbtaɪtl]   subtle ['sʌtl]
          obtuse [əb'tju:s]   subtlety ['sʌtltɪ]
          obturate ['ɒbtjʊəreɪt]   doubtful ['daʊtfl]

It is clear from the transcriptions that in words of column I <b> is pronounced, while it is silent in words of column II. If the structure of the words are considered, it can be seen that in words of column I there is a boundary between the <b> and the following consonant; there is a prefix that is attached to a stem. This boundary separates the final consonant of the prefix from the consonant at the beginning of the root. Thus the consonants belong to two different syllables and they are both duly pronounced without any effect on one another. In the second column, however, there is no boundary as such in the words and the <b> is silent. Therefore, it can be concluded that <b> is mute in front of <t> provided that the former is not part of a prefix. If this kind of <b> is represented by b_{-p}, the following rule can be formulated.

(3) $b_{-p} \rightarrow \varnothing$ —— t

This is not the only context in which <b> is silent. When there is an <m> before the consonant, it can exert an influence on the pronunciation of the stop in some contexts. Study the following examples, most of which come from Wijk (1966: 115).

(4)   I   II
          ambition [æm'bɪʃn]   limb [lɪm]
          symbol ['sɪmbl]   climber ['klaɪmə]
          bombard [bɒm'ba:d]   bomb [bɒm]
          amber ['æmbə]   climbing ['klaɪmɳ]

The examples show that <b> is silent after <m> in final positions and before inflectional endings. (Notice that the ending in <amber> is different from the one at the end of <climber>.) Let E_i stand for inflectional endings, and the point can be stated formally as follows.

(5) $b \rightarrow \varnothing / m$ —— (E_i)#

Combined with Rule (3), this rule yields the following formal statement.

(6) $b_{-p} \rightarrow \varnothing / \begin{Bmatrix} \text{—— t} \\ \text{m —— } (E_i)\text{\#} \end{Bmatrix}$

As the silent <b> after <m> cannot occur in a prefix, the first part of the rule is written in the same way as Rule (3). This takes care of both cases and allows the collapse of the two rules.

4.2.2. Silent <p>. The letter <p> is also silent in some contexts. If it comes before the group of sounds represented by the features [+anterior, +coronal, α strident, -α voice, -α nasal], it may be silent. Let us study some words and see in what contexts the consonant is not pronounced. (The examples in column II come from Wijk, 1966: 119.)

(7) I   II
hypnotize ['hɪpnətaɪz]   pneumonia [nju:'məʊnɪə]
capsule ['kæpsju:l]   psychology [saɪ'kɒlədʒɪ]
lapse [læps]   psalm [sɑ:m]
cheapness ['tʃi:pnɪs]   pneumatic [nju:'mætɪk]
grapnel ['græpnəl]   bronchopneumonia ['brɒŋkənju:'məʊnɪə]

Column I words include sounded <p> letters, but in the words of column II the consonant is not pronounced. When the consonant is silent, it occurs together with another consonant in the same syllable. But when the two consonants belong to different syllables, both of them are pronounced. Moreover, <ps> combination has a silent <p> when it starts a word. If this context is also taken as the beginning of a syllable and if this position is represented by #∑, the rule can be stated in the following way.

(8) $p \rightarrow \varnothing / \#\sum \underline{\hspace{1cm}} \{^s_n\}$

4.2.3. Silent <t>. The next consonant letter to be considered here is <t>. This consonant is silent in the words of column II below that are taken from Wijk (1966: 120).

(9)   I   II
abstentious [æbs'tenʃəs]   fasten ['fæsn]
existence [ɪg'zɪstəns]   listening ['lɪsnɪŋ]
abstract ['æbstrækt]   listener ['lɪsnə]
adjust [ə'dʒʌst]   hustle ['hʌsl]
existential [ˌegzɪs'tenʃl]   bustled ['bʌsld]

The consonant <t> appears after <s> in all these examples. The cluster precedes <en> in some of the examples in column II, but this is not a clue, because there are examples in column I as well that have the same spelling pattern. What makes the words of column II distinct from similar words in column I is that the sequence <sten> is either at the end of the words or before the suffixes that have been identified as E_i-type endings. The same is true of the other group of words in column II. These words contain <stle> and the combination is either at the end of the word or before an inflectional ending, represented as E_i here. In the words of column I, such an ending does not exist. Thus the following generalization can be made.

(10) $t \rightarrow \varnothing / s \underline{\hspace{1cm}} \{^{le}_{en}\} (E_i) \#$

4.2.4. Silent <d>. Like other stops, <d> can also be silent in certain contexts. The sound that affects the pronunciation of <d> is [n]. However, the reference books used for the purposes of this study do not show concordance in this regard. Therefore, it becomes necessary to make a choice and base the rules on the examples found in one of the references. For this purpose, Jones (1972) is chosen because it shows more consistency and the transcriptions are rule-governed. The following examples are all taken from the said source. In cases where there is an option between a silent <d> and a sounding one, the silent form has been chosen.

(11)   I   II
landlady ['læn,leɪdɪ]   handle ['hændl]
grandfather ['græn,fɑ:ðə]   binding ['baɪndɪŋ]
handkerchief ['hæŋkətʃɪf]   bound [baʊnd]
landslide ['lænslaɪd]   boundary ['baʊndrɪ]
handsome ['hænsəm]   winds [waɪndz]
blindness ['blaɪnnɪs]   bandage ['bændɪdʒ]

In all these examples, there is an <n> before <d>[1]. When there is a vowel or a syllabic consonant after the <d>, the consonant is pronounced. It is also pronounced when it is at the end of a word or before a neutral suffix[2]. In other contexts, the consonant is silent. This indicates that the consonant should be in medial position in order to be silent. Moreover, the syllable structure should also be considered. In words of column II, the consonant <d> starts a syllable while in the words of column I, <d> appears at the end of the syllable. This position can initiate a generalization about the contexts in which <d> is silent. If this position is symbolized by $\Sigma\#$, which does not include word final position nor the position before an E_i-type ending, the following rule can be devised.

(12) $d \rightarrow \varnothing / n \longrightarrow \Sigma\#$

There is also another context in which <d> can be silent, and it is before <g>. Usually <d> appears before <g> in contexts in which the latter sounds as [dʒ]. In this case, the <d> is not pronounced. For example in <judge> and <knowledge>, where <g> is before <e> and should be pronounced as [dʒ], <d> is silent. However, in contexts in which <g> should be "hard" (pronounced as a stop sound), <d> is pronounced. In these cases, the two consonants do not belong to the same syllable. For example, in <mudguard> and <bloodguilt> both stops are pronounced and they belong to different syllables.

4.2.5. Silent <k> and <g>. From the list of stops, <k> and <g> are left to be considered. These letters can be silent when they come before [+anterior, +nasal] sounds. <g> may be silent in front of both nasal sounds represented by these features, but <k> can be silent only before <n>. The examples in (13), most of which come from Wijk (1966: 92) indicate the positions in which the letter <g> is or is not pronounced.

(13)	I	II
	agnostic [æg'nɒstɪk]	gnat [næt]
	diagnose ['daɪəgnəuz]	impugn [ɪm'pjuːn]
	signal ['sɪgnəl]	sovereign ['sɒvrɪn]
	ignore [ɪg'nɔ:]	sovereignly ['sɒvrɪnlɪ]
	stagnant ['stægnənt]	assignment [ə'saɪnmənt]
	sigma ['sɪgmə]	paradigms ['pærədaɪmz]
	dogma ['dɒgmə]	assigning [ə'saɪnɪŋ]
	fragment ['frægmənt]	assigner [ə'saɪnə]
	ragman ['rægmæn]	diaphragm ['daɪəfræm]
	paradigmatic [ˌpærədɪg'mætɪk]	
	diaphragmatic [ˌdaɪəfrəg'mætɪk]	

The spelling <gn> appears in all positions, initially, medially and finally. The group <gm> does not appear word-initially, but it is found in the other positions. The letter <g> in <gm> is silent only in the final position, but the <g> in <gn> is mute in two of the positions in which it is found, word-initially and word-finally. Yet, in <assignment>, <sovereignly>, <assigning>, <assigner> and <paradigms>, <gn> and <gm> are found in the middle position, and the <g> is mute. However, this is different from the medial positions found in column I. The sequence appears before a word boundary; there is a suffix added to an independent word. The suffixes that appear in this position are either of E_i-type or start with a consonant. The latter are the endings

that Dickerson (1982) calls neutral. They can be referred to as E_n and the observations can be stated in the following way.

$$(14) \quad g \rightarrow \varnothing \, / \left\{ \begin{array}{l} \# \!\!-\!\!-\, n \\ -\!\!-\left\{ \begin{array}{c} m \\ n \end{array} \right\} \; (\left\{ \begin{array}{c} E_i \\ E_n \end{array} \right\}) \, \# \end{array} \right\}$$

Let us now examine the contexts in which <k> is silent. Study the following examples.

(15)
	I	II
	darkness ['dɑːknɪs]	know [nəʊ]
	nicknack ['nɪknæk]	knife [naɪf]
	breakneck ['breɪknɛk]	antiknock ['æntɪnɒk]
	crookneck ['kruːknɛk]	foreknowledge [fɔːˈnɒlɪdʒ]
	banknote ['bæŋknəʊt]	penknife ['pennaɪf]

These examples reveal that <k> is silent when it is at the beginning of a word or at the beginning of an independent stem attached to a prefix. These two positions can be referred to as the beginning of a syllable. This will exclude cases like <sickness> and <banknote> where <kn> appears word-medially, but the two letters are not in the same syllable and there is no silent letter. Thus the rule can be stated in the following way.

(16) $k \rightarrow \varnothing \, / \, \#_{\Sigma} \!\!-\!\!-\, n$

There are other examples in column I that seem to have silent letters. This happens when there is a <ck> combination. It seems that one of the consonants is pronounced and the other is mute. This is in fact the general case of gemination reduction which was already considered. As both consonants have the [k] sound, the consonant simplification rule calls for the deletion of one.

It was already mentioned that <c> should also be included in the list of the stops, because it sometimes stands for the sound [k]. From the point of view of being silent in certain contexts, <c> can be considered in the combinations <cc> and <sc> as well as in <ck>.

In the combination <cc>, when both consonants have the sound [k], there will be only one [k] sound, as in <accomplish>, <accompany> and <account>.[3] This is, as already mentioned, due to the absence of gemination in English. The same thing happens when both consonants in the combination <sc> have [s] sounds. Again, only one [s] is pronounced, so it is usually assumed that <s> is pronounced but <c> is not. As examples, consider <science>, <scissors> and <adolescence>.

4.2.6. Silent <n>. The letter <n> is silent when it comes after <m>, but not in all contexts. Let us study some examples and see where there is a silent <n>. (The examples in column II are taken from Wijk, 1966: 119.)

(17)
	I	II
	amnesty ['æmnəstɪ]	solemn ['sɒləm]
	autumnal [ɔːˈtʌmnəl]	autumn ['ɔːtəm]
	columnal [kəˈlʌmnəl]	column ['kɒləm]
	condemnable [kənˈdemnəbl]	condemn [kənˈdem]
	infirmness [ɪnˈfɜːmnɪs]	solemnly ['sɒləmlɪ]
	columnist ['kɒləmnɪst]	columns ['kɒləmz]

The cluster <mn> mostly occurs in medial and final positions. The only word in which this combination occurs at the beginning is <mnemonic> where <m> is silent. The words in the two columns above indicate that <n> is silent in final positions and before neutral endings.

(18) n $\rightarrow$ $\varnothing$ / m —— (E$_n$) #

4.2.7. Silent <r>. In some dialects of English <r> can be syllabic, but in the type of English this study is concerned with, there is no syllabic <r>, because the consonant is not pronounced in the contexts in which it could be syllabic. This leads to the silent <r>. Wherever <r> is found in an unstressed syllable and it is not immediately followed by a vowel sound, it is silent. This includes final position as well, because at the end of the word there is no vowel immediately following the consonant. However, if a word that ends in a silent <r> is immediately followed by another word beginning with a vowel sound, the <r> is pronounced.

4.2.8. Silent <l>. In some words, <l> is found in patterns such as <alm>, <alk>, <alf>, and <olk>. These spelling patterns not only signal a different pronunciation for the vowel, but also call for the silence of <l>. Thus in cases where there are [a:] and [ɔ:] sounds for <a> in the patterns mentioned here, the <l> will be mute[4]. The same thing applies to <olk> when <o> is long. The following examples which are taken from Wijk (1966: 118) include silent <l>.

(19)   calm [ka:m]   psalm [sa:m]   almond ['a:mənd]
        half [ha:f]   calf [ka:f]   behalf [bɪ'ha:f]
        chalk [tʃɔ:k]   talk [tɔ:k]   walk [wɔ:k]
        folk [fəuk]   yolk [jəuk]

The rules pertaining to this area can be formulated as follows:

$$(20)\ l \rightarrow \varnothing / \left\{ \begin{array}{c} ɔ: \\ əu \end{array} \right\} \text{—— } k$$

$$(21)\ l \rightarrow \varnothing / a: \text{——} \left\{ \begin{array}{c} m \\ f \end{array} \right\}$$

4.2.9. Silent <w> and <h>. The next letter to be considered here is <w> which is silent in front of <r> provided that it does not stand for a vowel sound. Words like <write>, <typewriter>, <shipwreck> and <wrench> can be mentioned as examples.

A very well-known example of a silent letter is <h> in <wh> words. In British RP, all these words are pronounced with a silent <h>, though in some dialects of American English a [h] sound is heard before [w].

4.2.10. Silent <gh>. The combination <gh> also becomes silent in some contexts. It is silent before <t> with the word <laughter> being an exception.

(22)   caught [kɔ:t]   bought [bɔ:t]
        light [laɪt]   daughter ['dɔ:tə]
        doughtiness ['dautɪnɪs]   lightening ['laɪtnɪŋ]

Thus the following rule can be formulated.

(23) gh $\rightarrow$ $\varnothing$ / —— t

In contexts other than this, <gh> is silent after <i>, as in <high>, <weigh> and <sigh>, but elsewhere the <h> becomes silent and there is a [g] sound. Where there is a word boundary as in word compounds, both consonants are pronounced. In other words, <gh> or any element of the combination can be silent when both elements are in the same syllable. Consider the following examples.

(24)   I   II
                  spaghetti [spə'getı]   doghouse ['dɒghaʊs]
                  aghast [ə'gɑːst]   froghopper ['frɒghɒpə]
                  yoghurt ['jɒgət]   staghound ['stæghaʊnd]

4.2.11 Other letters. There are also some other letters such as <ch, f, ph, th, m> that are mentioned in Wijk (1966) and are silent in some words. Because of their low frequency, these cases are not studied here. Interested readers may refer to Wijk (1966: 115-122).

5. Conclusion

It can be seen that the regularity of the spelling pattern and the morphology of words can easily guide us to the correct pronunciation of words. The rules presented here will prevent us from making hasty generalizations which would confuse us and our students. One may encounter examples such as debt, doubt and subtle and come up with the conclusion that <b> is not pronounced in front of <t>. Later, when a counterexample such as subtitle' is observed, it may be taken as an exception, which is as confusing as saying that in some words the rule works but in some others it does not.

The rules formulated here can be pedagogically useful. However, it should be borne in mind that in most cases the formulas, as they are presented here, may not be pedagogically applicable. The teacher's awareness of the paradigm will guard him/her against hasty generalizations. Then depending on his/her discretion and on the proficiency level of the students, s/he may choose to present the generalizations in such a way that the students understand them.

Acknowledgements

Notes

1. There is only one word in which <d> comes before <n> and is silent. The word is <Wednesday>.
2. Neutral suffixes are the ones that start with a consonant.
3. For information about the different pronunciations of <c> see Dickerson (1986, 1989, 1989a), Yarmohammadi and Pouretedal (1996) and Yamini (1997).
4. There are some words with <alm> spelling in which <a> is pronounced as [ɔː] and <l> is not silent. Examples: *almighty, almost* and *almanac.*

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