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ENGLISH CONSONANT SYSTEM

ABSTRACT. The present essay focuses on the English consonant system, outlining its main features. A language is a comprehensive system in which all parts are in relation to one another. Therefore, the present analysis of the English consonants deals with only a fragment of a wider system, that is the English phonetic system. As the object of the survey was limited to the description of consonants according to three fundamental parameters, i.e. voicing, place of articulation and manner of articulation, other very important phenomena (as similitude, assimilation, elision, length and rhythm) have not been dealt with. The paper, after describing very briefly the human phonatory system and the English vowel system, focuses analytically on the various classes of consonants of the English language, i.e. plosives, fricatives, affricates, nasals, laterals and approximants. For each member of a class, a short description of how the sound is produced is offered together with some relevant examples.

Every language has a set of sounds used to vehicle its oral expression. Although the combinations of such units is practically infinite, it is possible to retrieve the atomic phonetic constituents which form a well definite set of sounds known as phonemes. Naturally each phoneme may have slight variations in pronunciation, but as far as comprehension is not impeded, such variants are known as allophones. The graphical rendering of sounds may occur either through a phonematic transcription – which deals with the transcription of phonemes *only*, by means of IPA symbols – or through a phonetic transcription, which deals with the graphical representation of phones and allophones using IPA symbol chart as well¹.

¹ The International Phonetic Association, founded in 1886, has the aim “to promote the scientific study of phonetics and the various practical applications of that science. In furtherance of this aim, the IPA provides the academic community world-wide with a notational standard for the phonetic representation of all languages – the [International Phonetic Alphabet](https://www.internationalphoneticassociation.org/) (also IPA). The latest version of the IPA Alphabet was published in 2005”. The citation is drawn from the IPA website, reachable at <https://www.internationalphoneticassociation.org/>.

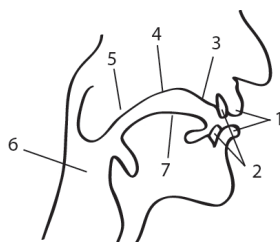
It is common, when dealing with the oral features of a language, to classify its sounds into two different categories, that is vowels and consonants. Such a widely accepted distinction generally reposes on the fact that there is a difference in the way the two classes of sounds are produced: in the case of vowels, in fact, an egressive pulmonic airstream flows without encountering any obstruction on its outward path while, in the case of consonants, one or more strictures are caused by a different disposition of the resonators. Nonetheless, such definition is not as accurate as it may seem as, in fact, it has been noted that what distinguishes vowels from consonants is the *relative sonority* or *carrying power*² and that it would perhaps be a wiser choice to study the distribution of sounds which leads to the formation of two different groups, i.e. vowels and consonants³. Still, the distinction based on the fact that the airflow is not hampered for vowels and somehow obstructed for consonants is nowadays the most widely accepted one⁴. So, beginning from such an assumption, it is possible to infer that a first, critical difference in the production of the two classes of sounds is given by the disposition of the resonators. It goes without saying that when we affirm that in pronouncing vowels the air can pass freely, it is implied that only two of the places where a stricture can be obtained are involved, that is the tongue and the lips while the other articulators have a passive role; in fact, there are

² See D. Jones, *An Outline of English Phonetics*, Cambridge University Press, 1989, pp. 24-25.

³ See P. Roach, *English Phonetics and Phonology*, Cambridge University Press, 2007, p. 11.

⁴ See S. Crisalli, *English Phonetics and Syllable Breaks*, Equilibri, 2014, p. 1.

seven main points of articulation (that is points where a full or partial obstruction can be created) and they are given by 1) the upper and lower lips, 2) the teeth, 3) the ridge, 4) the hard palate, 5) the soft palate, 6) the pharynx and 7) the tongue⁵, as shown in picture n. 1.

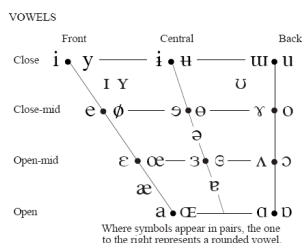


Picture n. 1
Points of Articulation

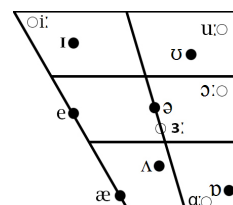
Furthermore, in considering vowels, it is possible to distinguish them according to the principle of cardinal sounds: vowels are in fact characterized mainly by the position assumed by the tongue (although the position of the lips, which can be spread, rounded or neutral, must be taken into consideration) and therefore it is possible to distinguish eight well defined vowel sounds, known as the eight primary cardinal vowel (PCV) sounds, usually numbered from 1 to 8, which are 1) i, 2) e, 3) ε, 4) a, 5) α, 6) ɔ, 7) o, 8) u: “to pass from PCV # 1 to # 2 and then to # 3 and # 4 the tongue, keeping its front position, is simply lowered a little, at approximately equal intervals. Accordingly, to pass from # 5 to # 6, # 7 and # 8 the tongue, keeping its

⁵ For a thorough description of the main points of articulation see L. Canepari, *Introduzione alla fonetica*, Einaudi, 1979, pp. 13-21. For an even more accurate anatomical description, see R. L. Drake, A. W. Vogl, A. W. M. Mitchell, *Gray's Anatomy for Students*, Churchill Livingstone Elsevier, 2010, p. 997 to 1060 and G. Anastasi et Alii, *Trattato di anatomia umana*, Edi Ermes, 2010, 3 vols, vol. 1, pp. 104-112 and vol. 2, pp. 19-68 and 225-258.

back position, is simply raised at equal intervals”⁶. Cardinal Vowel sounds are shown in picture n. 2.



Picture n. 2
Cardinal Vowel Sounds



Picture n. 3
English Vowels

Furthermore, varying the position of the lips, it is possible to produce Secondary Cardinal Vowel sounds. Unfortunately, dealing with consonants, it is not possible to apply the principle of cardinal sounds and to glide from one sound to another since “as a rule it is not possible to pass by almost imperceptible degrees from one consonant to another [...]: most consonants fall naturally into well-defined classes, classes which are clearly separated from neighbouring classes by essential differences in the place or manner of articulation”⁷. So, while vowels are usually distinguished according to their proximity to Cardinal Vowels and their being long or short (see pictures n. 2 and 3), consonants are classified according to different criteria.

⁶ See M. Laganà, *English Vowel System* in «Illuminazioni», n. 26, ottobre-dicembre 2013, p. 196. The magazine is freely available at the web address <http://compu.unime.it>.

⁷ See D. Jones, *An Outline of English Phonetics*, cit., p. 42. Nonetheless it is possible in certain cases to apply the cardinal sound principle to consonants: the Author states that the chief cases where it can be applied are “those in which the sounds under consideration all belong to one class as regards *manner* of articulation, and are all articulated by the *tongue* against the roof of the mouth”; see D. Jones, *ibid.*, p. 43.

So, what are the distinguishing features which allow to classify consonants? There are three parameters which define every single consonant and “we are in a position to uniquely identify each consonant of English by stating its articulatory properties. The criteria are usually given in the sequence: 1. voicing, 2. place of articulation, 3. manner of articulation”⁸. Therefore, taking into account the English Received Pronunciation, we can definitely classify each of its twenty-four sounds, which include “21 consonanti propriamente dette e 3 semivocali”⁹.

The first criterion, that is voicing, refers to the position and role of the vocal cords, that is a group of mucosal folds which, together with the vestibular folds, divide the middle laryngeal cavity into three sections, that is a vestibule, a middle chamber and the infraglottic cavity. Situated under the vestibular folds, the vocal folds constitute the rima glottidis which is interposed between the middle chamber and the infraglottic cavity. Just above the middle chamber, there is a similar structure called rima vestibuli: during phonation, the air is forced to pass through the closed rima glottidis, therefore causing the vibration of the vocal cords and the production of sounds (which can be later modified along their outward path by other resonators).

Naturally, vocal folds may assume different positions, that is “they may be held wide

⁸ See I. Plag, M. Braun, S. Lappe, M. Schramm, *Introduction to English Linguistics*, Mouton de Gruyter, 2007, p. 13. Nonetheless, D. Jones proposed a more detailed classification as, in his opinion, “descriptions of the manner of forming consonants should take into account the following particulars: (i) the place (or places) of articulation, (ii) the state of air-passage at the place (or places) of articulation, (iii) the position of the soft palate if not already mentioned under (i) or (ii), (iv) the state of the larynx if not already mentioned under (i) or (ii)”. See D. Jones, *An Outline of English Phonetics*, cit., p. 45.

⁹ See E. Menascè, *La pronuncia inglese*, Sansoni Studio, Firenze, 1981, p. 24.

apart, they may be closed completely, or they may be held loosely together so that they vibrate when air passes between them”¹⁰. In the first case the sound produced is defined as *breath*, in the third case the sound produced is called *voice*¹¹. In the second case, when they are tightly closed, at the moment of release, “l’aria compressa esce bruscamente producendo l’occlusivo laringale o colpo di glottide, che udiamo anche nella tosse, rappresentato dal simbolo [ʔ], che non è, dato lo stretto contatto delle corde vocali, né sordo né sonoro, mentre tutti gli altri suoni sono sordi o sonori o, al massimo, possono assumere stadi intermedi”¹². Furthermore, according to the pulmonary egressive power used to produce them¹³, “le coppie di consonanti sorde/sonore sono dette rispettivamente **forti** (*fortis*) o **leni** (*lenis*)”¹⁴.

¹⁰ See D. Jones, *An Outline of English Phonetics*, cit., p. 19. Furthermore, at the same page, we are reminded that “if the false vocal cords [...] are drawn towards each other leaving only a narrow space for the air to pass between them, the resulting sound is one variety of whisper”. See also P. Maturi, *I suoni delle lingue, i suoni dell’italiano. Introduzione alla fonetica*, Il Mulino, 2009, pp. 29-31.

¹¹ Naturally, in voicing, it is possible to recognize different degrees as we can vary the position of the vocal folds or even change the subglottal pressure as well; in the latter case, P. Roach, *English Phonetics and Phonology*, cit., p. 31, reminds that “three main differences are found: i) Variations in **intensity** – we produce voicing with high intensity for shouting, and with low intensity for speaking quietly. ii) Variations in **frequency** – if the vocal folds vibrate rapidly, the voicing is at high frequency; if there are fewer vibrations per second the frequency is lower. iii) Variations in **quality** – we can produce different-sounding voice qualities, such as those we might call harsh, breathy, murmured or creaky”.

¹² See L. Canepari, *Introduzione alla fonetica*, cit., p. 18.

¹³ It is also useful to remember that compression doesn’t have to be necessary of pulmonic origin: for instance, sounds of plosive nature can be obtained not only by pulmonic pressure which compresses the air blocked by some resonator, but also by raising the velum and closing the glottis at the same time: this kind of plosive sounds are termed ejective.

¹⁴ See E. Menascè, *La pronuncia inglese*, cit., p. 24. The reason of such a different classification is given by the fact that, as shown later, sometimes voiced consonants (as plosives in final position) have very poor voicing and, therefore, some phoneticians prefer to refer to the opposed elements

The second criterion, that is the one dealing with the place of articulation, allows the classification of consonants according to the kind of resonator which actually creates some kind of obstruction to the outgoing airflow. As already mentioned, there are seven resonators but, as sometimes more resonators act at the same time, we have nine chief classes of consonants: when the resonators involved are given by both lips, the corresponding sounds are termed *bilabial*; if the lower lip is articulating together with the upper teeth, we have *labiodental* sounds; when the tip of the tongue is pushed toward the upper teeth, the sound is classified as *dental*; when the tip or blade of the tongue is against the teeth-ridge the sound is named *alveolar*, but if the tongue is against the posterior part of the teeth-ridge the sound is acknowledged as *post-alveolar*; if the tip or blade of the tongue is against the teeth-ridge while the body of the tongue is raised, then the sound is *palato-alveolar*; when the frontal portion of the tongue is against the hard palate the sound is a *palatal* one, but if it is the backward part of the tongue which is pushed against the central and forward region of the soft palate the uttered sound will be *velar*. A final class, at which we have already hinted, is the one including *glottal* or *laryngal* sounds.

The last parameter to define consonants takes into account the manner of articulation, that is the condition of the airflow at the places of articulation according to which “four major phonetics possibilities are recognized [that is] a) total closure,

(voiced vs voiceless) of a consonant set with different labels (i.e. fortis vs lenis) which underline the power used in the production of the sounds rather than referring to the vocal cord vibration criterion which, in some cases, turns out to be almost irrelevant.

b) intermittent closure c) partial closure [and] d) narrowing”¹⁵. According to this principle several classes of consonants are recognized although their numbers vary from author to author as, quite often, the class of approximants is further subdivided in subclasses; nonetheless there are some core classes which are widely acknowledged, that is the ones concerning plosive, affricate, nasal and fricative consonants¹⁶.

Interweaving the second and the third criterion, and marking glottal sounds in red, breathed sounds in black and voiced sounds in blue, it is therefore possible to build a grid, which will be discussed below.

		Place of articulation								
		Bilabial	Labio-dental	Dental	Alveolar	Palato-alveolar	Post-Alveolar	Palatal	Velar	Glottal
Manner of articulation	Plosive	/p/ /b/			/t/ /d/				/k/ /g/	/ʔ/
	Fricative		/f/ /v/	/θ/ /ð/	/s/ /z/	/ʃ/ /ʒ/				/h/
	Affricate					/tʃ/ /dʒ/				
	Nasal	/m/			/n/				/ŋ/	
	Lateral				/l/					
	Approximant	/w/					/ɹ/	/j/		

¹⁵ See M. Bertuccelli Papi, *An Elementary Introduction to English Linguistics*, Edizioni ETS, 2000, p. 46.

¹⁶ For instance, besides the four core classes above mentioned, D. Jones, *An Outline of English Phonetics*, cit., p. 47, acknowledges five more classes (that is lateral, rolled, flapped, frictionless continuants and semi-vowels), I. Plag, M. Braun, S. Lappe, M. Schramm, *Introduction to English Linguistics*, cit., p. 14, just one more class (that is the one of approximant sounds), E. Menascè, *La pronuncia inglese*, cit., p. 25, two more classes (that is laterals and semivowels). Sometimes, as in K. Allan, J. Bradshaw, G. Finch, K. Burridge and G. Heydon, *The English Language & Linguistics Companion*, Palgrave Macmillan, 2010, p. 37, a slightly different terminology is used: so voiced consonant are referred to as sonorants, which “are, by manner of articulation: **flaps**, **trills**, **laterals**, **glides** and **nasals**. Members of the class of consonants known as obstruents are described in terms of three parameters: **voicing**; **place of articulation**; **manner of articulation**. Obstruents include by manner of articulation: **stops**, **fricatives**, and **affricates**. (Obstruents are named for being supposedly more obstructive to the air stream than sonorants; but the character of trills and flaps must throw doubt on this claim)”.

Plosive consonants

A plosive sound is produced by totally closing the air outward path, compressing the airflow and then abruptly opening the passage, so that the outgoing airflow produces an explosive sound. The process to obtain a plosive sound may be subsumed in four steps, that is a closing phase, during which a stricture is caused by moving one or more articulators, a compression phase, when the air blocked by the stricture is compressed, a release phase, when the stricture is eliminated by removing the block created by the resonator/s, and a post-release phase which is determined by what happens after the release phase¹⁷. Apart from the glottal stop, which is not a relevant sound in RP, “there are six plosive consonant phonemes in English [...], represented in phonetic transcription by the letters **p, b, t, d, k, g**”¹⁸: /p/, /t/ and /k/ are voiceless whilst /b/, /d/ and /g/ are voiced.

As a class, plosive consonants may occur at the beginning, in the middle or at the end of a word. The position they occupy is very important as it has implications on their pronunciation and, sometimes, on the pronunciation of nearby letters. Generally speaking, when in initial position, /p/, /t/ and /k/ are silent in the closing and compression phases but, when we come to the release phase, the air is expelled causing an audible plosion; what is notable is that in the post release phase there is “a period during which air escapes through the vocal folds, making a sound like **h**. This

¹⁷ P. Roach, *English Phonetics and Phonology*, cit., p. 32.

¹⁸ D. Jones, *An Outline of English Phonetics*, cit., p. 138.

is called **aspiration**”¹⁹ and, thereby, we note such sounds as /p^h/, /t^h/ and /k^h/ in narrow phonetic transcriptions²⁰. What happens in the post release phase is that, due to the compression of the air, once the block caused by the resonator/s is removed, the air keeps flowing out for a certain period of time. So, necessarily, a plosive cannot be fully pronounced unless it is followed by another independent sound which is in fact produced by the reserve of air which keeps flowing out once the stricture is removed; the independent sound following a plosive can be either a vowel or a consonant. As to voiceless plosive consonants in initial position, they have a silent closing phase and very little voicing immediately before the release phase. If carefully pronounced, voicing can be heard distinctly throughout the compression phase; /b/, /d/ and /g/ cannot be preceded by any consonant.

¹⁹ P. Roach, *English Phonetics and Phonology*, cit., p. 34; aspiration does not regard voiced plosives and, in voiceless plosives, it does not occur if they are immediately followed by /l/, /w/, /r/ or /j/ as noted by the same Roach, *ibid.*, p. 55, and E. Menascè, *La pronuncia inglese*, cit., p. 29. Furthermore, there is no aspiration also when such sounds are preceded by /s/. D. Jones, *An Outline of English Phonetics*, cit., p. 152, notes that “when we pronounce a *voiceless* plosive, e.g. **p**, “by itself”, it is generally followed by a short breathed sound which may be represented by ^h, thus **p^h**. When we pronounce a voiced plosive, e.g. **b**, by itself, it is generally followed by a short vowel, which may be represented by ^ə, thus **b^ə**”.

²⁰ A phonetic transcription is broad when containing little more information than the phonemic transcription whilst a narrow transcription includes as many information as possible. L. Canepari, *Introduzione alla fonetica*, cit., pp. 173-174, reminds that “nei dizionari e nelle grammatiche, quando si fa uso d’una trascrizione fonetica si tratta generalmente d’una *trascrizione fonetica larga* («broad»), che usa cioè un simbolo o una combinazione di simboli per ogni elemento distintivo [...]. Questo tipo di trascrizione può corrispondere a una trascrizione fonemica, in quanto indica solo gli elementi distintivi e spesso usa simboli semplici, evitando per quanto possibile simboli «strani». A volte però, proprio coll’intento di dare più informazioni fonetiche per distinguere meglio tra gli allofoni della lingua studiata e quelli della lingua materna, s’introducono simboli più vicini alla realtà fonetica [...]”. Naturally, the last paragraph defines what a narrow transcription is.

The role of plosives (both voiceless and voiced) in medial position depends somewhat on the phonetic environment which surrounds them, so that they may behave as if they were either at the beginning or at the end.

If plosives are found in final position, the plosion after the release phase is quite weak and sometimes can even be unnoticed; when at the end of a word, /b/, /d/ and /g/ do not usually affect the phonetic rendering of the sound which precedes them while voiceless plosives shorten the vowel sound before them. It might be puzzling to read that voiced plosives have very little plosion in final position and that is why some phoneticians prefer to address them in terms of fortis and lenis plosives²¹. Interestingly, it is possible that a plosive consonant sound (eventually in final position) may be preceded by another plosive sound²². What happens in such cases is that we have an incomplete plosion since the former is not fully pronounced: this is what happens in words such as *action* /'ækʃn/ where the /k/ doesn't fully express its plosive potential which is replaced by a silence; a similar situation occurs also when there is a word ending with a plosive consonant followed by another word beginning with the same sound as in *black cat* /blæk 'kæt/. Finally, before dealing with the features of English plosive consonants, two more particular cases of plosion should be dealt with. The former occurs when a plosive is followed by a nasal consonant (that is /m/, /n/ or /ŋ/): in such cases, as soon as the velum is lowered, the air escapes

²¹ See note 14. Furthermore, sometimes /p/, /t/ and /k/ in final position may be reinforced by a glottal stop preceding the closing phase as in *sack* /sækʔk/.

²² The situation occurs even if the preceding sound is an affricate one.

from the nose rather than from the mouth so we have a nasal plosion as in *cotton* /'kɒtn/. The latter refers to cases in which /t/ or /d/ are followed by the lateral /l/: in such cases, as the tongue does not leave the teeth-ridge and the air escapes from its sides, such sounds are referred to as lateral plosives, as in the word *beetle* /'bi:tl/.

The sounds /p/ and /b/ are the main representatives of their phoneme categories. They are usually graphically rendered, respectively, by the letters *p* and *b* and can be dealt with together since they differ only as to the different role of vocal cords in their pronunciation: in fact /p/ is voiceless, i.e. vocal cords are held wide apart and no vibration is produced, whilst /b/ is voiced. The production of both voiceless and voiced plosives occurs in the same way: the air is blocked by an obstruction caused by closing the lips and raising the velum. After the path blockage, the air pressure is raised due to a lung compression, which is then followed by an opening of the mouth which lets the air suddenly flow outside and therefore an explosive sound is produced. In consideration of the fact that the point of articulation is given mainly by the lips, of the nature of the sound produced and of the role of vocal cords, /p/ is termed a voiceless bilabial plosive and /b/ a voiced bilabial plosive consonant. Possible variants of plosion (incomplete, nasal and lateral plosion) have been mentioned *supra*; moreover a plosionless variant of /b/ and /p/ is heard when the sound is followed by /t/ or /d/ as in the word *ribbed* /rɪbd/. Finally, in some cases, the letters *b* and *p* are silent. As for *b*, this happens when the letter is final and preceded by the letter *m*, as in the words *bomb* /bɒm/, *climb* /klaɪm/ and *thumb* /θʌm/ as well as

when it is followed by *t* in some words as *debt* /det/, *doubt* /daʊt/, *subtle* /sʌtl/, *bdellium* /'deliəm/. *P* is silent when it is part of words beginning by the groups *pt*, *pn* and – usually – *ps*; furthermore, it is also silent in the words *corps* /kɔː*/ or /kɔːz/, *raspberry* /'rɒːzbəri/, *cupboard* /'kʌbəd/ and *receipt* /rɪ'siːt/.

The sounds /t/ and /d/ are the normal sounds of letters *t* and *d*. They are produced by lifting the soft palate together with a raising of the tip of the tongue which gets to touch the teeth-ridge. When the tongue is removed from its position, a plosion occurs. The difference between the two sounds is that in the production of the former vocal cords do not vibrate, while they do so when the latter is uttered; therefore /t/ is known as a voiceless alveolar plosive whilst /d/ represents the voiced realization. Generally, /t/ is aspirated and pronounced as /t^h/ when it precedes a stressed vowel although the shortening occurs, to a lesser degree, in unstressed context too, as in *better* /'betə*/. Other remarkable cases of /t/ sounds include a dental variant when such a sound precedes /ð/ and /θ/ as in the word *eighth* /'eitθ/ or the expression *at that* /ət 'ðæt/, while when /t/ precedes /r/, it becomes a post-alveolar sound. Also, the sound may be plosionless when it is followed by /t/, /d/, /tʃ/ or /dʒ/; similarly, the plosion can be also nasal or lateral. The sound /t/, besides being related to the letter *t*, may also occur in the pronunciation of the suffix *-ed* of verbs ending in voiceless consonants other than *t* as in *missed* /mɪst/²³.

²³ R. Spadaro, *La pronuncia della lingua inglese*, Edigraphica Sud Europa, 1979, p. 200, suggests that “una regola mnemonica per rammentare i suoni /p/, /k/, /f/, /θ/, /ʃ/, /tʃ/, /s/ (che in un certo senso costituiscono la chiave di pronuncia di *-ed* desinenza) si ha notando che essi sono i *suoni consonantici* contenuti nella frase «*Four thickish chaps*» (fɔː θɪkɪʃ tʃæps)”. When the suffix *-ed* is

The letter *T* is silent in words ending in *-ften*, *-stle*, *-sten* as in the words *soften* /'sɒfn/, *whistle* /'wɪsl/ and *fasten* /'fɑ:sn/; furthermore it is silent in *boatswain* /'bəʊsn/, *chestnut* /'tʃesnʌt/, *Christmas* /'krɪsməs/, *hautboy* /'əʊbɔɪ/, (*h*)*ostler* /'ɒslə/, *mortgage* /'mɔ:ɡɪdʒ/, *often* /'ɒfn/; it is also silent when in final position of words of French origin as *ballet* /'bæleɪ/ or *cabaret* /'kæbərei/.

As to the sound /d/, which is usually represented by the letter *d*, and is, as mentioned before, a voiced alveolar plosive, it is articulated by pushing the tip of the tongue against the teeth-ridge. The /d/ phoneme – in particular contexts – is varied and pronounced as dental when followed by /θ/ or /ð/, as post-alveolar before /r/, as nasal plosive when /m/ or /n/ follow it, as lateral plosive in words such as *riddle* /'rɪdl/, as plosionless when followed by /t/, /d/, /tʃ/ or /dʒ/, or partially voiced when it is at the beginning or at the end of a word or when preceded by a voiceless consonant. Being all the allophones voiced (in full or in part), they are not generally aspirated. Finally, although in some languages variants of retroflex /t/ and /d/ exist, in RP such variants do not occur.

The sound /k/ is produced by raising the velum (in order to impede air passing to the nasal cavity) and pressing the back part of the tongue against it. The compression

added to verbs ending in vowels or voiced consonants (other than /d/), it is pronounced /d/, as in the verb *deceived* /dr'i:si:vd/; when the verb ends in *d* or *t*, the suffix is pronounced as /-ɪd/ as in the verb *added* /ædɪd/. D. Jones, *An Outline of English Phonetics*, cit., p. 145, notes that “the termination *-ed* in adjectives is almost always pronounced **-ɪd**. Hence a difference in pronunciation is made between aged (participle) **eidʒd** and aged (attributive adjective) **'eidʒɪd**, *blessed* (participle) **blest** and *blessed* (adjective) **'blesɪd**, etc. Similarly, the adverbs formed from participles take the pronunciation **-ɪdli**, whatever the form of the simple participle may be; compare *unfeigned* **ʌn'feɪnd**, *unfeignedly* **ʌn'feɪnɪdli**, *marked* **mɑ:kt**, *markedly* **'mɑ:kɪdli**, *composed*, **kəm'pouzɪd**, *composedly* **kəm'pouzɪdli**”.

of the air coming from the lung causes a pressure which, when the tongue is released, creates a plosive sound; therefore the /k/ sound is described as a voiceless velar plosive sound and the sound /g/ is its voiced realization. It is usually represented by the letter *k* or by the letter *c* (when in final position or followed by a consonant or by the vowels *a*, *o*, *u*); when followed by the letters *n*, *k* is silent. Verbs ending in *c*, in order to maintain the /k/ sound, add a *k* before taking the suffix *-ed* or *-ing*. The digram *qu*, which is generally read as /kw/, is read as /k/ when in words ending in *-que*, *-quet*, *-quette*, *-quer*, *-queur*, *-quor* (with the exception of the word *banquet* /'bæŋkwɪt/) and in words as *quay* /ki:/, *queue* /kju:/, *quoit* /kɔɪt/, *mosquito* /mə'ski:təʊ/, *piquant* /'pi:kənt/, *masquerade* /,mæskə'reɪd/, *mannequin* /'mænɪkɪn/ and *marquee* /mɑ:'ki:/. The phoneme /k/ may also be represented by the letter *x*, when it is not read as /gz/.

The phoneme /k/ has various allophones determined by the vowels which may follow it (which may cause a more backward or forward articulation) and by the degree of lip rounding and aspiration; furthermore, /k/ has nasal plosion when followed by nasal consonants and undergoes incomplete plosion when followed by another plosive sound.

The phoneme /g/, a voiced velar plosive, cannot have any aspiration and may have different allophones according to the fact that it may be articulated more frontally or more backwardly; in initial and final position or when preceded by a voiceless consonant it may have only partial voice or no voice. As for the other kinds

of plosive sounds, it has nasal plosion when followed by nasal consonants and incomplete plosion when followed by another plosive. The phoneme /g/ is usually associated to the letter *g* when it is at the end of a word, or followed by a consonant or by the vowels *a*, *o*, *u*²⁴; moreover, the letter is pronounced as /g/ also when followed by the letters *e*, *i*, *y* in words as *get* /get/, *give* /gɪv/ and *gynaecology* /ˌɡaɪnəˈkɒlədʒɪ/ although in many words, above all of Latin origin, when followed by such letters, *g* sounds as /dʒ/. Finally, the phoneme /g/ is related to the letter *x* in the digram *ex* which is pronounced as /gz/ when followed by a (semi-)stressed vowel; nonetheless the trigram *exc* is read as /eks/.

Fricative Consonants

Fricative consonants are characterized by the fact that, in producing them, a stricture of the path causes the outgoing airflow to produce a peculiar hissing sound. Naturally, the more the narrowing, the more the friction will be audible. English has a certain number of fricative sounds, which can be classified according to the point of articulation and, therefore, we have two labiodental, two dental, two alveolar, two post-alveolar consonants and a glottal one. Reasonably, each couple is made up of a fortis (voiced) and a lenis (voiceless) consonant.

The sound /f/ is a breathed labiodental fricative; it is realized by pushing the lower lip against the upper teeth and forcing the air through the in-between space. It

²⁴ Naturally, exceptions, such as *gaol* /dʒeɪl/ and *mortgagor* /mɔːɡɪdʒɔː*/, exist.

is related to the letters *f*²⁵ and *ph*²⁶. Another letter cluster which can be read as /f/ is *gh* in the words *enough* /ɪ'nʌf/, *rough* /ɾʌf/, *slough* /slʌf/, *tough* /tʌf/, *cough* /kʊf/, *trough* /trʊf/, *draught* /dra:ft/, *laugh* /lɑ:f/ and *laughter* /lɑ:ftə*/²⁷; the sound /f/ also occurs in the word *lieutenant* /lef'tenənt/.

The sound /v/ is a voiced labio-dental fricative: it is obtained in the same way as /f/, with the difference that in this case vocal cords vibrate. For this sound there are only not very important allophones although voiceless variants of /v/ are heard when the phoneme is at the beginning or at the end of a word. It is usually related to the letter *v*; the digram *ph* may also sound as /v/²⁸.

The sounds /θ/ and /ð/ are dental fricative ones: the former is breathed whilst the latter is voiced. They are obtained by pushing the tip of the tongue against the upper teeth (and not, as sometimes some people do, between upper and lower teeth). The sounds /θ/ and /ð/ are both related to the digram *th*. Such letters, when in initial position, sound usually as /θ/ but as /ð/ in the words *than* /ðæn/, *that* /ðæt/, *the* /ði:/, *thee* /ði:/, *their* /ðeə*/, *theirs* /ðeəz/, *them* /ðem/, *themselves* /ðəm'selvz/, *then* /ðen/,

²⁵ Nonetheless the letter *f* is read /v/ in the word *of* and in its compounds; furthermore the letter is silent in the word *halfpenny* /'heɪpni/.

²⁶ Also in this case, we have exceptions in the words *nephew* /'nevju:/ (but /'nefju:/ is possible), and *Stephen* /'sti:vɪn/, where the digram is read as /v/, in the word *shepherd* /'ʃepəd/, where it sounds as /p/ and in the word *phthisis* /'θaɪsɪs/ in which it is silent.

²⁷ However, the digram *gh* may be read in several other ways. It is silent in the endings *-ugh*, *-ught*, *-ughter*, *-igh* and *-ight*, it sounds as /p/ in the word *hiccough* /'hɪkʌp/, as /ə/ in the word *Edinburgh* /'edɪnbərə/, as /gh/ in some geographical names and as /h/ or is silent in some Irish surnames; in the remaining cases it sounds as /g/.

²⁸ See note 26.

thence /ðens/, *thenceforth* /ˌðens'fɔ:θ/, *thenceforward* /ˌðens'fɔwəd/, *there* /ðeə*/ and compounds, *these* /ði:z/, *they* /ðei/, *thine* /ðam/, *this* /ðɪs/, *thither* /'ðiðə/, *those* /ðəʊz/, *thou* /ðau/, *though* /ðəʊ/, *thus* /ðʌs/, *thy* /ðai/ and *thysself* /ðai'self/²⁹. In medial position, *th* sounds as /θ/ in non-Germanic words as in *thick* /θɪk/ and as /ð/ in the opposite case as in *mother* /'mʌðə*/ and when the digram is followed by the letters *e*, *er* and *ern*. In final position, *th* may sound as /θ/ but it sounds as /ð/ when, in plural substantives, it follows a long vowel or diphthong, when it is followed by a silent *e* and in the words *with* /wið/, *bequeath* /bɪ'kwi:ð/, *betroth* /bi'trəʊð/, *booth* /bu:ð/, *heathen* /'hi:ðn/, *mouth* (verb) /maʊð/, *smooth* /smu:ð/, *with* /wi:ð/.

Alveolar fricative phonemes sound as /s/ and /z/, the former of which is breathed, the latter voiced. They are produced by pushing the (tip and) blade of the tongue against the teeth-ridge and raising somewhat the body of the tongue toward the hard palate. The phoneme /s/ has various allophones depending on the quality of the hissing and on the force with which it is uttered; furthermore the teeth conformation has also a role in its production.

The phoneme /s/ is usually linked to the letter *s* but, if found in different positions, it may be read as /z/: it is not easy to define all the conditions required by the different allophones as “most of the rules regarding the use of **s** and **z** are so

²⁹ But *th* sounds as /t/ in the words *Thames* /temz/, *Theresa* /tɪri:zə/, *Thomas* /tɒməs/ and *thyme* /taim/.

complicated and subject to numerous exceptions”³⁰; furthermore, when followed by *i* or *e*, the letter *c* sounds as /s/. There are also cases in which the letter *s* is silent as in the words *aisle* /aɪl/, *apropos* /'æprəpəʊ/, *bourgeois* /'bɔ:ʒwa:/, *Carlisle* /kɑ:'laɪl/, *chamois* /'ʃæmwa:/, *corps* (sing.) /kɔ:*/, *coxswain* /'kɒksweɪn/, *debris* /'deɪbrɪ/, *demesne* /dɪ'meɪn/, *Grovesnor* /'grəʊvnə*/, *island* /'aɪlənd/, *isle* /aɪl/, *islet* /'aɪlət/, *précis* /'preɪsi:/, *rendezvous* /'rɒndɪvu:/ and *viscount* /'vaɪcaʊnt/.

Palate-alveolar fricative consonants are given by /ʃ/ which is breathed and /ʒ/ which is voiced. To articulate them, the tongue has to be near the most backward part of the teeth-ridge, with its body raised, while the teeth are close, the velum lifted and the lips protruded. /ʃ/ has no relevant allophones, while /ʒ/ in initial and final position may occur without voice. /ʃ/ is usually represented by the digram *sh* as in *short* /ʃɔ:t/; the sound also occurs when the letters *-ci-*, *-sci-*, *-si-*, *-ti-* precede an unstressed vowel or a syllabic consonant as in the words *voracious* /və'reɪʃəs/, *fascism* /'fæʃɪzəm/, *pension* /'penʃn/, *rational* /'ræʃənl/. *S* is also read as /ʃ/ in the ending clusters *-sia*, *-sion*, *-sure* when preceded by a consonant as in *Russia* /'rʌʃə/; such endings, together with the cluster *-sual*, when preceded by a vowel are read as /z/ in *-sia* and as /ʒ/ in

³⁰ D. Jones, *An Outline of English Phonetics*, cit., p. 187. Anyway we are reminded, at the same page, that “the following points should, however, be noted. (i) The *s* denoting the plural of nouns or third person singular of verbs is pronounced **s** when the preceding sound is a voiceless consonant, e.g. *cats* **kæts** *takes* **teɪks** *laughs* **lɑ:fs**. (ii) The *s* in the terminations *-sive*, *-sity*, is always pronounced **s**, e.g. *conclusive* **kən'klu:sɪv**, *curiosity* **kjʊrɪ'ɒsɪtɪ**. (iii) Final *s* preceded by one of the letters *a*, *i*, *o*, *u* or *y* is pronounced **s** (when not mute) [...]. The only exceptions are the inflected forms of nouns and verbs (e.g. *plays* **pleɪz**, *was* **wɒz** or **wəz**) and the single word *his* **hɪz** (weak form **ɪz**), as **æz** (weak form **əz**), *whereas* **wɛə'ræz**, *avoids* **ævɔɪdʒ** **pɔɪz**”. The author also reminds that *s* sounds as /s/ in words ending in *-se*, with a few exceptions (e.g. *cleanse* /klenz/, *parse* /pa:z/). If in case (i) the preceding sound is that of a vowel or a voiced consonant, the *s* will sound as /z/. The same occurs when the *s* is in final position and preceded by a pronounced *e*.

-sion, -sure, -sual, as in the words *Rhodesia* /rəʊ'di:zjə/, *pleasure* /'pleʒə*/ and *adhesion* /əd'hi:ʒn/; *s* is read as /ʃ/ in the words *Asia* /'eɪʃə/, *assure* /ə'ʃʊ:*/ , *ensure* /ɪn'ʃʊ:*/ , *magnesia* (substance) /mæg'ni:ʃə/, *sugar* /'ʃʊgə*/ , *Sean* /ʃə:n/ and *sure* /ʃʊ:/. Another rendering of the breathed palate-alveolar sound is given by the digram *ch* when it occurs in French words. /ʒ/ is related to the letter *s* and to the group *-si-* when it is collocated after a stressed vowel; it is also found in various other words and in borrowings from the French; it must be remarked that it may be a part of affricate sounds.

The sound /h/ is produced by letting the vocal cords vibrate but without creating any other friction: it is articulated in the glottis and therefore it is termed a breathed glottal fricative. This phoneme is usually followed by a vowel and, in a sense, it is preparatory to the vowel pronunciation. This implies that there are different /h/ sounds, each of them related to the following vowel. In consideration of its features, “phonetically **h** is a voiceless vowel with the quality of the voiced vowel that follows it. Phonologically, **h** is a consonant”³¹. When voiced sounds precede and follow the /h/, it is pronounced as voiced. The phoneme /h/ is represented by the letter *h*, although such letter is silent in the words *heir* /eə*/ , *honest* /'ɒnɪst/, *honour* /'ɒnə*/ and *hour* /'aʊə*/ , as well as “in unstressed syllable and notably in names ending in *-ham*, such as *Balham* 'bæləm, *Wykeham* 'wɪkəm (= *Wickham* and *Wycombe*) and in the words *hedgehog* 'hedʒɔg or 'hedʒhɔg, *vehicle* 'vi:ɪkl, *annihilate* ə'naɪəleɪt [...].

³¹ P. Roach, *English Phonetics and Phonology*, cit., p. 53.

In educated English **h** is often dropped in unimportant words such as *him*, *her*, *have*, when unstressed [...]; [it is also] occasionally dropped in initial unstressed syllables of longer words, such as *horizon*, *historical*, *hotel*³². Finally, the digram *wh* may represent the phoneme /h/ in the words *who* /hu:/ and *whole* /həʊl/.

Affricate Consonants

Affricate consonants are, in a sense, related to plosive sounds. The point is that while in plosive consonants, after the air compression, there is an abrupt release and a full audible plosion, in producing an affricate sound the removal of the blockage – which prevents the air outflowing – is made slowly so that, instead of a sudden plosion, we have a kind of gradual glide between the ‘burst’ and the following sound. Generally speaking, in English it is usual to recognize two main affricate consonants, that is /tʃ/ and /dʒ/ but since affricates are related to plosives as to the way of articulation, it is possible to distinguish as many affricates as plosives, with the exception of the glottal stop. Nonetheless, such affricate sounds are either rare – as /ts/, /dz/ – or their features are often hardly distinguished from a juxtaposition of two different sounds as for /tr/, or, if the separation of the resonators is too quick, they originate the corresponding plosive sound.

The consonant /tʃ/ is produced by raising the velum and placing the tip and blade of the tongue against the most backward part of the teeth-ridge as when we are

³² D. Jones, *An Outline of English Phonetics*, cit., pp. 202-203.

producing the sound /ʃ/: the air passage is therefore blocked. The separation of the tongue from its counterpart is made in a way which allows the sound /ʃ/ to be heard before the following sound is produced; lips are usually protruded. /ʃ/, as vocal cords do not vibrate, is termed a voiceless palate-alveolar affricate consonant; it is usually related to the graphemes *ch* and *tch* as in *rich* /rɪʃ/ and *Ipswich* /'ɪpswɪʃ/, to the letter *t* in the unstressed ending *-ture*, to the words ending in *-stion*, as in *nature* /'neɪtʃə*/ and *question* /'kwɛstʃən/ and exceptionally in word *righteous* /'raɪtʃəs/. Naturally, the sequence /t/ followed by the fricative /ʃ/ occurs in English, but it is generally related to compound words.

The sound /dʒ/ is the voiced counterpart of the voiceless palate-alveolar affricate consonant; it is produced in the same way, with the only difference that, in its production, vowel cords do vibrate. It is related to the letters *j* and *g* when the latter is followed by *e*, *i* and *y* as in the words *John* /dʒɒn/, *George* /dʒɔ:dʒ/, *gin* /dʒɪn/, *gym* /dʒɪm/. Another digraph which is linked to the sound /dʒ/ is *dg* as in the word *pledge* /pledʒ / and other miscellaneous words.

Nasal Consonants

Nasal consonants are obtained by causing a blockage of the air coming out from the mouth and by letting it escape from the nose; this is obtained by keeping the velum in a lowered position. There are three nasal sounds in English, that is /m/, /n/ and /ŋ/.

The sound /m/ is a voiced bilabial nasal consonant: it is obtained by totally closing the lips, lowering the velum and letting the air flow from the nose; the tongue has no role in the production of this sound and vocal cords vibrate; an example is given by the word *might* /maɪt/. There are a certain number of allophones due to approximation phenomena, partial devoicing or when /m/ is followed by /f/ or /v/. The sound /m/ is linked to the letter *m*, even if it is silent in word beginning with the group *mn*.

The sound /n/ is obtained by pushing the tip of the tongue against the teeth-ridge, lowering the velum and letting the air outflow from the nose; vocal cords vibrate and, therefore, it is termed a voiced alveolar nasal sound. /n/ is the main phoneme of the class, although unimportant allophones exist, and it is related to the letter *n* as in the word *night* /naɪt/.

The third member of the group is the sound /ŋ/, which requires the back part of the tongue to prevent the air from flowing out from the mouth and the lowering of the velum so that the air may escape from the nose; therefore the sound is a voiced velar nasal consonant. This phoneme is represented by the digram *ng*. According to the vowel which precedes and/or follows it, there are several allophones, given by a more backward or forward positioning of the tongue. Anyway, /ŋ/ is articulated in the same place as /k/ and /g/. In order to classify it according to its positioning, it should be noted that it never occurs in initial position but it is often found in a medial one, where, when followed by the letter *g*, it shows a peculiar behavior. In fact,

considering a couple of words as *hunger* /'hʌŋgə*/ and *bringer* /'brɪŋə*/ it is possible to note that, in the former, /ŋ/ is followed by a /g/, which does not apply to the second word. The phenomenon has been explained according to the different morphology of the words: “within a word containing the letters ‘ng’ in the spelling [...], **ŋ** occurs without a following **g** if it occurs at the end of a morpheme; if it occurs in the middle of a morpheme it has a following **g**”³³. Nonetheless, the rule has an exception which regards the formation of comparatives and superlatives which require the adding of the suffixes *-er* and *-est*. In such cases, in fact, it would be expected the comparative *longer* to be pronounced without any /g/ following the /ŋ/, whilst the actual pronunciation is /lɒŋgə*/³⁴. If a word ends with the group *-ng*, there is no /g/ after the /ŋ/. Furthermore, in words ending in *-ng*, such a group never follows a long vowel or a diphthong and may only follow /ɒ/, /ʌ/, /æ/, /e/ and /ɪ/.

³³ P. Roach, *English Phonetics and Phonology*, cit., p. 59.

³⁴ D. Jones, *An Outline of English Phonetics*, cit., p. 171, reminded that “in regard to the pronunciation of the sequence of letters *ng* when medial, it is to be noted that (i) **ŋ** alone is used in words formed from verbs by the addition of the suffixes *-er* and *-ing*, e.g. '**siŋə**, *hanging* '**hæŋŋ**; (ii) the prefix *con-* when followed by the sounds **k** or **g**, is pronounced by most people with **ŋ** when the following syllable is quite unstressed, but with **n** when the following syllable has stress (primary or secondary); thus *Congress* '**kɒŋgres**, *Congregation* '**kɒŋgri**'**geɪʃn** have **ŋ**, while *concur* **kən**'**kə:**, *congratulation* **kən**'**grætju**'**leɪʃn** have **n**; (iii) the prefixes *en-*, *in-*, *un-* are pronounced with **n** by most speakers of Received English: thus *engage* **in**'**geɪdʒ**, *ingredient* **in**'**gri:****dɪənt**, *ungrateful* '**ʌn**'**greɪtfl** have **n**. These latter prefixes are also generally pronounced with **n** when **k** follows, as in *encourage* **in**'**kærɪdʒ**, *increase* (noun) '**ɪnkri:**s, *increase* (verb) **in**'**kri:**s, *uncomfortable* '**ʌn**'**ɒmfətəbl**. There is, however, a tendency at present day to use **ŋ** in place of **n** in cases (ii) and (iii)”.

Lateral Consonants

In English, the lateral phoneme /l/ is the main of its class, although many allophones are acknowledged. Two among them deserve to be described: they are known as ‘clear’ /l/ and ‘dark’ /l/. The former occurs before vowels and /j/ while the latter is found before consonants or before a pause. In both of them, the tongue touches the teeth-ridge (in some people the point of contact may be given by the upper teeth) so to form a kind of blockage in the middle of the mouth, thereby causing the air to flow from each side of the central part of the tongue; nonetheless, there are people who put the tongue as to block one of the side escapes, so that the air outflows from the other. Anyway, the sound produced is a voiced alveolar lateral consonant. What differentiates /l/ family allophones is the position of the central part of the tongue, regardless of its tip position. The body of the tongue may, in fact, take any position, including the one of a vowel, so that the sound produced acquires the same power (resonance) of that particular vowel. Therefore, the distinction between clear and dark /l/ is given by the different resonance which the sounds obtain according to where the body of the tongue is located: in clear /l/, the frontal part of the tongue is raised toward the hard palate, whilst in dark /l/ the back part of the tongue is lifted toward the velum: “the English ‘dark’ l [...] generally has the resonance of a back vowel approaching u [...] while] ‘clear’ l [...] generally has the resonance of a front vowel approaching i”³⁵. It must be remembered that dark /l/ often

³⁵ D. Jones, *An Outline of English Phonetics*, cit., p. 176.

has syllabic value³⁶. When /l/ follows *p* or *k* at the beginning of a stressed syllable, another allophone of the /l/ family is found: in this case, in fact, the sound is devoiced.

Approximant Sounds

An approximant sound is not very easy to describe. In fact, as to the manner of articulation, resonators get close to each other but not in order to produce a consonant properly defined (as a plosive or a nasal); nonetheless the category of approximant sounds includes only consonants but vowels are articulated in the same manner. In modern literature three sounds are included under the approximant heading that is /r/, /w/ and /j/. The sound /r/ will be examined first, as it is maybe the one which presents more difficulty in the description³⁷. In fact, besides the most spread variety of /r/ sound, which is termed a voiced post-alveolar approximant, there are many

³⁶ A syllable requires the presence of a vowel sound but syllabic consonants may form a syllable by themselves as they act as the peak of the syllable (where, in fact, we found no vowel): “valore sillabico hanno spesso in inglese /l/ finale [l] (*camel* ['kæml], *final* ['faɪnl], *pistol* ['pɪstl] e /n/ finale [ŋ] (*dozen* ['dʌzn], *button* ['bʌtn], *passion* ['pæʃn], *vision* ['vɪʒn]); anche /m/ finale può assumere valore sillabico nella terminazione *-sm* quando questa è pronunciata senza /ə/ intermedia a discrezione di chi parla (*prism* ['prɪzm], *cubism* ['kju:bɪzm], *optimism* [ɒptɪmɪzm], *spasm* ['spæzm])”: see E. Menascè, *La pronuncia inglese*, cit., p. 30. P. Roach, *English Phonetics and Phonology*, cit., pp. 86-87, states that, in BBC accent, we find syllabic l “where we have a word ending with one or more consonant letters followed by ‘le’ (or in the case of noun plurals or third person singular verb form, ‘les’) [...] Such words usually lose their final letter ‘e’ when a suffix beginning with a vowel is attached, but l usually remains syllabic [...] we also find syllabic l in words spelt, at the end, with one or more consonant letters followed by ‘al’ or ‘el’”.

³⁷ For instance, P. Roach, *English Phonetics and Phonology*, cit., I. Plag, M. Braun, S. Lappe, M. Schramm, *Introduction to English Linguistics*, cit., E. Menascè, *La pronuncia inglese*, cit., define /r/, or at least its most spread allophone, as an approximant, while previously it was plainly defined as a fricative. See D. Jones, *An Outline of English Phonetics*, cit., p. 194.

allophones which include lingual and uvular variants; furthermore, a retroflex flap sound exists in other languages. In pronouncing /r/, vocal cords vibrate, the lips are slightly rounded and the tip of the tongue approaches the alveolar region but never touches the hard palate: “the tongue is in fact usually slightly backwards with the tip raised; consonants with this tongue shape are usually called **retroflex**”³⁸. The curling of the tip places it before the alveolar-ridge and that is why the sound produced is defined as post-alveolar. Moreover, if /r/ follows *p*, *t* or *k* located at the beginning of a syllable, the sound is different as it is perceived as breathed and with little friction. The sound /r/ is related to the letter *r*: when the consonant is followed by a vowel, we hear the sound /r/, but, when it is in final position, it is not pronounced, as in the word *bar* /bɑ:*/. Nonetheless, there are some accents of English in which the sound is perceived even if the *r* is in final position; when /r/ is pronounced, even if *r* is in final position, the accent is said to be rhotic, in the opposite case it is said to be non-rhotic.

The sound /w/ is bilabial and the sound /j/ is palatal; both are voiced. Once known as semivowels, they belong to the category of approximant sounds. As to the manner or articulation /w/ is similar to /u:/ and /j/ to /i:/, but they have a consonant distribution. They are linked to the letters *w* and *y* respectively. Generally speaking, they should not be pronounced as fricatives, unless preceded by *p*, *t* or *k* at the beginning of the syllable. The sound /w/ is found at the beginning of a syllable – but it is silent in the group *wr-* as in *write* /rait/ – or when preceded by a consonant. This

³⁸ P. Roach, *English Phonetics and Phonology*, cit., p. 62.

phoneme is also linked to the vowel *u* when preceded by *q* as in *quarry* ['kwɒrɪ] and, frequently, to the consonant *g* in unstressed contexts as in *linguist* ['lɪŋgwɪst]. The sound is also found in miscellaneous words as *choir* ['kwaɪə*], *once* [wʌns], *one* [wʌn], *suite* [swi:t].

The sound /j/ is usually followed by a vowel and, therefore, it is possible to recognize different allophones on the basis of the different vowel which follows it. Besides, being related to the letter *y*, the sound /j/ is frequently associated to *i* and *e* when they are followed by /ə/.

Sometimes the phoneme is also heard before the letters *u*, *ue*, *ui*, *ew* and *eu* when they are read as /u:/; the occurrence is regulated as follows: “the **j** is never inserted after **tʃ**, **dʒ** or **r**, or after **l** preceded in turn by a consonant [...]; the **j** is regularly inserted after **p**, **b**, **t**, **d**, **k**, **g**, **m**, **n**, **f**, **v**, **h** [...], after **l** preceded by a vowel, when that vowel is stressed [...] or semi-stressed [...]. Usage varies in words in which **l** is initial or preceded by an unstressed vowels [...] and] after **s**, **z** and **θ**”³⁹.

Conclusion

The present analysis of English consonants deals with only a fragment of a wider system, that is English phonetics. As the object of our survey was the description of consonants according to three fundamental parameters, i.e. voicing, place of articulation and manner of articulation, other very important phenomena (as

³⁹ D. Jones, *An Outline of English Phonetics*, cit., p. 210.

similitude, assimilation, elision, length and rhythm) have not been dealt with. Naturally, as stated at the beginning, the survey has been focused on RP but, of course, the actual situation is by far more complex than the simplified framework offered⁴⁰. Nonetheless, for consonants too, it is possible to trace once again apparently hidden connections between the phonetic/phonological level and the semantic one (as, for instance, the different way of reading the digram *ng* when in medial position or the different way in which the suffix *-ed* is read in words which are spelt in the same way but have a different function as in the oppositions adjective vs past participle or adverb vs past participle), which, in turn, confirms once again the fact that all language aspects are interrelated and that only artificially we can considerate them as separate: a language is in fact a comprehensive system in which all parts are related to one another and this link is reflexed at all levels of analysis.

⁴⁰ See B. Kachru, Y. Kachru, C. Nelson (Eds), *The Handbook of World Englishes*, Wiley-Blackwell, 2006 and L. Canepari, *English Pronunciation*, Aracne, 2010.

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