relationship between language, voice and gesture: as a consequence, there is a considerable number of volumes which may be interesting for a psychologist or a communication expert. Further comments on intonation were occasionally treated inside wider studies on the art of speaking and delivering a speech all through the eighteenth century. In this chapter we shall consider Thomas Sheridan's *Lectures on Elocution* (1762): the volume anticipated the modern distinction between 'natural' tones, which are universals, and 'instituted' tones, which are language-particular[34]. Nevertheless, only at the end of the century did Henry Sweet, Harold Palmer and Daniel Jones become fully aware of all the prosodic effects and voice qualities of the English speaker and develop a general phonetic approach to the study of intonation.

### 3.3.1. *Melody and Measure*

In 1827, the American scholar James Rush wrote in his *The Philosophy of the Human Voice:*

> *Time,* in speaking, is denoted by the terms; long, short, quick, slow, and rapid. Music has a more precise scale of relationship, in its order of signs from semibreve to double-demisemiquaver. [...] Mr. Steele gives examples of an application of the symbols of music, to the variable time of discourse[35].

In fact, Steele's *Essay* provided demostration for the existence of tonal variations in English almost one century before Rush. Joshua Steele was a prosodist, a musician, and an elocutionist, who created the first systematic transcriptional method for notating *length, stress and pitch features.* Some examples of his transcriptions are given in fig. 3.6.

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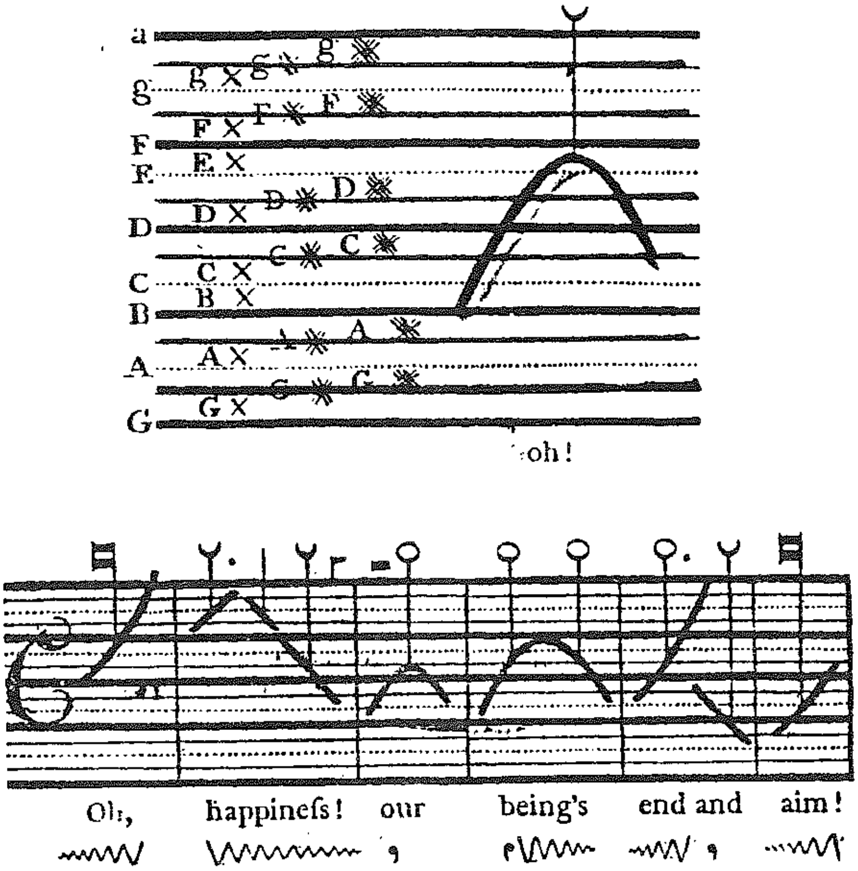
[34] T. Sheridan, *A Course of Lectures on Elocution: Together with Two Dissertations on Language (1762),* Georg Olms Verlag, Hildesheim-New York 1970.

[35] J. Rush, *The Philosophy of the Human Voice, Embracing its Physiological History, Together with a System of Principles*, cit., p. 70.



*«As the practice of the enharmonic genus of music, and the art of reducing the melody and measure of speech to practicable and legible notes* [...] *have lain* [...] *in a terra incognita, for at least a thousand years past, I think these small specimens produced may be our vouchers to prove that we have discovered the land and marked out the route which may be followed by others»* (p. 46).

Fig. 3.6 – Steele's Transcriptions
Source: J. Steele, *An Essay Towards Establishing the Melody and Measure of Speech* (1775).

His primary intent was that of defining the *melody and measure of speech*. He wrote:

> The puzzling obscurity relative to the *melody and measure* of speech, which has hitherto existed between modern critics and ancient grammarians, has been chiefly owing to a want of terms and characters, sufficient to distinguish clearly the several properties or accidents belonging to language; such as, *accent, emphasis, quantity, pause,* and *force*; instead of which *five terms*, they have generally made use of *two* only, *accent* and *quantity*, with some loose hints concerning *pauses*, but without any clear and sufficient rules for their use and measurements; so that the definitions required for distinguishing between the expression *force* (or loudness) and *emphasis*, with their several degrees, were worse than lost; their difference being tacitly felt, though not explained or reduced to rule, was the cause of confounding all the rest[36].

### 3.3.1.1. Joshua Steele (1700-1791)

Steele's study on English melody started as a reply to Lord Burnett (or Burnet, better known as Lord Monboddo) on the subject of English oral language. Monboddo wrote that the melody of the English language was "nothing better than *the music of a drum*, in which we perceive no difference except that of a louder or softer, according as the instrument is more or less forcibly struck"[37]. In answer to this statement, Steele convinced Monboddo that English speech *has* melody and rhythm. He showed that this melody was a kind of tune or pitch pattern inherent to speech; that this rhythm was a recurrence of measured quantity which depends on the nature of language and on an inner understanding of the context.

To prove his theses, he analysed oral speech *according to musical principles,* showing how speech moves up and down the musical scale by infinitesimal intervals between syllables. He noted that, unfortunately, these intervals are not *perfect,* unlike the intervals between musical notes, which are always perfectly distinguishable[38]. Since speech melody could not be precisely rendered by literal musical symbolizations, Steele invented a new notation for speech consisting of curved lines or *slides,* replacing the traditional notes on a musical scale, and a complex system of symbols adapted from musical notation[39].

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[36] J. Steele, *Op. Cit.*, p. VIII.

[37] J. Burnet, *Of the Origin and Progress of Language* (1773-1792), Georg Olms Verlag, Hildesheim-New York 1974, vol. II, part II, p. 300.

[38] We read in the *Essay* (J. Steele, *Op. Cit.*, p. 4): «*The melody of speech* moves rapidly up or down by *slides*, wherein no graduated distinction of tones and semitones can be

The word *accent* is used in his treatise, according to the classical tradition, with the meaning of *pitch* or *intonation*[40], and it is of three kinds:

- grave
- acute
- circumflex (rising and falling).

The first two are considered as *single fixed tones,* whereas the last one is the mark of *vocal slides,* in which the *acute* may become *grave* and viceversa. In fact, the *circumflex* is a sort of «flight, up and down, through nineteen quarter tones»[41]. Tonal variations occur as a rule in daily conversation, and they are fundamental tools to convey meaning to words and sentences. Rising pitch usually wants the listener's attention to be kept up, whereas falling pitch completes the sentence. This apparently elementary intuition will become a fundamental idea in the elocutionary tradition which will soon develop in Great Britain and in the United States.

Steele's first steps towards the description of *accent,* or *intonation,* were taken on the basis of repeated experiments on his own oral performance. These 'tests' were carried out with the help of a bass viol, in order to determine both the absolute range of pitches through which

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measured by the ear; nor does the voice [...] ever dwell distinctly, for any perceptible space of time, on any certain level or uniform tone, except the last tone on which the speaker ends or makes a pause. [...] whilst almost every one perceives and admits singing to be performed by the ascent and descent of the voice through a variety of notes [...]; it seems, at first sight, somewhat extraordinary, that even men of science should not perceive the rapid slides of the voice, upwards and downwards, in common speech».

[39] For a more detailed analysis of Steele's notation and thought see: A. Zanola Macola, *La melodia della parola secondo Joshua Steele,* «L'analisi linguistica e letteraria», 1, 1996, pp. 173-203.

[40] Cfr. J. Burnet, *Op. Cit.,* vol. II, part II, p. 278; J. Steele, *Op. Cit,* p. 10.

[41] J. Steele, *Op. Cit,* p. 8. For a discussion on the double form of the *circumflex* see also: J. Walker, *Op. Cit.*, p. 16.

the voice was capable of sliding, and the manner of progression from tone to tone. As to the first matter, Steele reported as follows:

> I made trial of the fundamental (or deepest note of the instrument) that seemed to be key note to the common level of my voice in speaking, [...] and made use of the open tone of the fourth string of a violoncello, [...] which was the octave below my common level. I found my slides in common discourse went about a fifth (of the diatonic scale) above the level or key-note, and about a seventh below it; but if empassioned, it run two whole tones higher, which made in the whole extent a compass of 13 notes, or octave and sixth[42].

The Author soon realized that the continuous changes from *acute to grave* and viceversa did not follow the rules of the diatonic or chromatic scale, because they were too rapid to be recognized by a human ear. As a consequence, he unequivocally declared, against Monboddo's theory, that English rhythm wasn't monotonous.

With his system of notation, Steele hoped that anyone might read a written text as a score of music and that performances of great actors and speakers might be preserved. He illustrated his hopes with a transcription of the famous *Hamlet*'s soliloquy as delivered by David Garrick (fig. 3.7): here he used the musical staff, the clef, the time signature, and supplementary indicators for rate, pause, pitch, force, and stress. In a sense, he tried to anticipate what the phonograph and the tape recorder were to do later.

On both sides of the Atlantic, prosodists and elocutionists employed in one way or another Steele's new analysis of phonetic, dynamic, and prosodic components of speech. His lively concern for *living facts* was atypical at his time: in this way, he taught his followers *to observe phenomena* of English speech, rather than to yield to any authoritarian pronouncement.

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[42] J. Steele, *Op. Cit*, pp. 37-38.

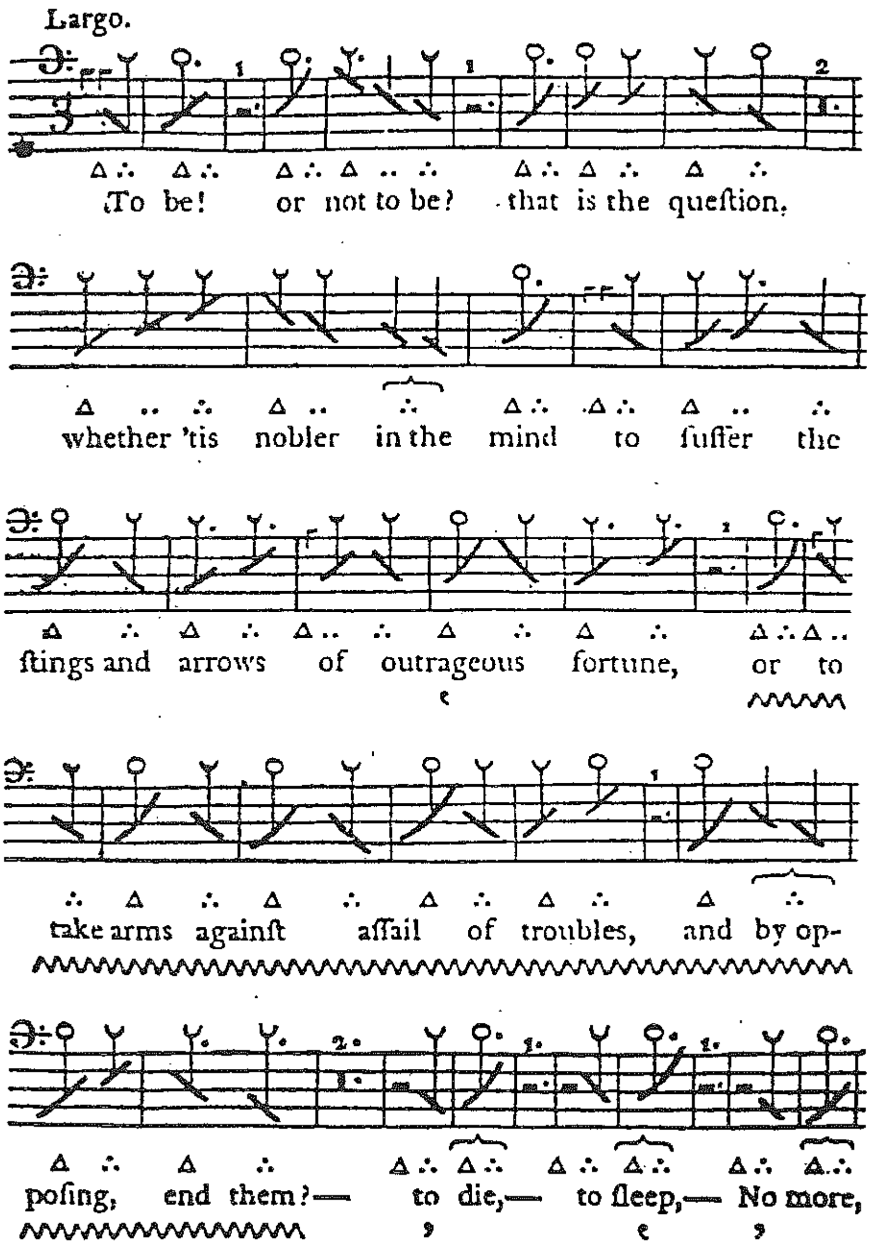
Largo.
To be! or not to be? that is the queſtion,
whether 'tis nobler in the mind to ſuffer the
ſtings and arrows of outrageous fortune, or to
take arms againſt aſſail of troubles, and by op-
poſing, end them?— to die,— to ſleep,— No more,

Fig. 3.7 – Hamlet's Soliloquy
Source: J. Steele, *An Essay Towards Establishing the Melody and Measure of Speech* (1775).

#### 3.3.1.2. John Walker (1732-1807)

Walker was thirty-seven years old when he abandoned his career as an actor and turned to teaching, lecturing, and writing on elocution. He published many works on pronunciation, elocution, and composition and became the most important scholar of the eighteenth-century in matters of pronunciation, especially after his publication of *A Critical Pronouncing Dictionary and Expositor of the English Language* in 1791[43].

He published six books on elocution: *Exercises for Improvement in Elocution (1777)* is a collection of readings, dedicated to Garrick; *Elements of Elocution (1781)* is an important systematic presentation of his elocutionary theory, later summarized in *Hints for the Improvement in the Art of Reading (1783); A Rhetorical Grammar (1785)* presents an adaptation of the old canons of rhetoric to the 'new' canons of elocution; *Melody of Speaking Delineated (1787)* explains a method of teaching elocution by means of signs adapted from musical notation; finally, *The Academic Speaker (1789)* is a book of extracts for declamatory practice[44]. *The Elements of Elocution* and the treatise on *Melody* are his most interesting works for our research.

The basic idea in Walker's *Elements* is that the reader obtains harmony of sound and achieves fidelity to the author's purpose by applying the inflections found in nature to the various grammatical forms utilized by the author. These inflections are four:

- *rising*
- *falling*
- *circumflex rising*
- *circumflex falling*

His distinction is not new. In fact, Steele had written about rising, falling, and circumflex inflections six years before Walker's publication. However, Walker's application of the theory of slides to grammatical forms is undoubtedly original. He went back to this subject in the following years, especially in his treatise on *Melody.*

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[43] T. Crowley, *Proper English? Readings in Language, History, and Cultural Identity,* Routledge, London-New York 1991, pp. 94-110.

[44] Walker's complete bibliography is given in *Ibidem* and in: F.W. Haberman, *English Sources of American Elocution,* in K. Wallace ed., *History of Speech Education in America,* Appleton-Century-Crofts Inc., New York 1954, p. 117. See also: M. Cohen, *Sensible Words*, Johns Hopkins University Press, Baltimore 1977; A.P.R. Howatt, *A History of English Language Teaching*, Oxford University Press, Oxford 1984.

Walker's analysis of intonation and prosody was done with a strong pedagogical intent, as the *Advertisement* to the *Melody of Speaking* underlines:

> The Author addresses those few who philosophize on language, and who look with a favourable eye on whatever promises improvement. By a long course of teaching he has repeatedly experienced the utility of his plan, and, for the use of his pupils, is induced to make this addition to his former treatises on the same subject[45].

He paid a great deal of attention to theoretical principles, and was perfectly aware of the basis of tonal contrasts. As a premise, he outlined the difference between *musical melody* and *oral melody,* as Steele had done before him:

> Singing sounds are such as continue a given time, upon one precise point of the musical scale, and then leap as it were from one note to another; but *speaking sounds, instead of dwelling on the note they begin with, slide either upwards or downwards to the neighbouring notes*, without any perceptible rest on any; so that speaking sounds are exactly of the same kind with those which are produced by a violin when the finger slides up and down the string, while the bow is drawn across it. *The singing sound, therefore, is a Monotone, and the speaking sound a slide or inflection*[46].

In this treatise the *inflections* were widely described and exemplified in five groups, instead of the originary four:

i) *The Monotone.* Transcribed with a horizontal line, similar to that which is used to express a long syllable in verse (¯), it is considered by the Author as «a continuation or sameness of sound, like that produced by repeatedly striking a bell; it may be louder or softer, but continues in exactly the same pitch»[47]. According to Walker, one of the best examples of this inflection is given in Milton's *Paradise Lost* (Book ii, v. I: "High on a throne of royal state, which far...").

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[45] J. Walker, *Op. Cit.,* p. ii.

[46] *Ibid.*, p. 7. My italics.

[47] *Ibid.,* p. 15.

ii) *The rising inflexion* (´). It is described as the «upward turn of the voice we generally use at the comma, or in asking a question, which begins with a verb».
iii) *The falling inflexion* (`). It is generally used «at the colon and semicolon, and must necessarily be heard in the answer to the former question».
iv) *The rising circumflex (v).* It begins with a falling slide and ends with a rising slide on the same syllable.
v) *The falling circumflex* (^). It begins with the rising and ends with the falling slide.

Additional emphasis may be superimposed on each of the five inflections. It is of two kinds: emphasis of passion or emphasis of sense. The first «gives force and energy to every word in a sentence, and cannot, therefore, be denoted by marking single words, but must be described [...] at the head of the sentence»[48]. The other «marks every word in opposition or contradistinction to any other word expressed; or marks opposition or contradistinction to some word not expressed, but understood»[49].

A choice of readings follows the theoretical explanation. Here it is the complete list: *Mr. Pitt's Answer to Mr. H. Walpole, Lord Strafford's Speech, Lord Clifford's Speech, King Edward the IV's Speech, The Oration of Cominius, The Speech of Hermocrates, John of Gaunt's Speech, Speech of the Lady in Comus on Temperance, Speech of the Lady in Comus on Chastity, Portia's Speech on Mercy, Demosthenes against Aeschines on the Crown*.

### 3.3.1.3. Thomas Sheridan (1719-1788)

Sheridan's biography is astonishingly similar to Walker's. Both of them were actors, theatre managers, and then lecturers, writers and lexicographers. But their methods were basically different. As we have seen previously, Walker was a pedagogue and tried to establish a system; on the contrary, Sheridan was an observer, liked generalizations, and sought a revival of oratorical training.

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[48] *Ibid.*, p. 18.

[49] *Ibid.*, p. 19.

His works deal with three main subjects: education, pronunciation, and elocution. His three works dealing more specifically with reading and speaking are published lectures. In *A Discourse being Introductory to a Course of Lectures on Elocution and the English Language (1759),* Sheridan recommended the study of the spoken language and the principles and rules of elocution. He insisted on these subjects also in *A Course of Lectures on Elocution (1762):* in this series of seven lectures he provided the working definition of elocution, established his philosophy, and discussed articulation, pronunciation, accent, emphasis, tones (or *notes)* of the speaking voice, pauses or *stops,* key or *pitch,* management of the voice and gesture. *Lectures on the Art of Reading (1775)* repeats many of the theories discussed in *A Course*[50]. The central proposition of these works is that oratory, properly taught, will eliminate the disorders in the English language. By 'language' he means:

> any way or method whatsoever, by which all that passes in the mind of one man, may be manifested to another. And as this is chiefly done by an agreement in the use of certain signs, it is no matter what those signs are; there being little or no natural connection, between any verbal signs and our ideas, which is sufficiently evinced, by the variety of languages that are spoken, in the different countries of the world[51].

Sheridan's *A Course of Lectures on Elocution (1762)* underlines the importance of *words,* which are necessary tools for the expression of ideas. As a matter of fact, words are *the marks or symbols of our ideas*[52]. However, the usage of words is strictly dependent on correct pronunciation. In fact, the meanings of words is entirely conditioned by the speaker's good pronunciation. For what, Sheridan asks, would be the point of being able to be sure of the meaning of a word if the pronunciation of the same word by different speakers resulted in our not being able to recognize that word? Communication cannot take place without good elocution. The Author explains the idea clearly in his *Lecture VI*, in which the *tones* of the English language are described:

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[50] Here we shall discuss only Sheridan's most important work: T. Sheridan, *A Course of Lectures on Elocution (1762),* cit. (see frontcover in fig. 3.8). A detailed evaluation of his complete work can be found in: F.W. Haberman, *English Sources of American Elocution,* cit., pp. 105-126; T. Crowley, *Proper English,* cit., pp. 63-72.

[51] T. Sheridan, *Op. Cit.,* p. 94.

[52] *Ibid.,* p. 98. My italics.

> Now, as in order to know what another knows, and in the same manner that he knows it, an exact transcript of the ideas which pass in the mind of one man must be made by sensible marks, in the mind of another; so in order to feel what another feels, the emotions which are in the mind of one man must also be communicated to that of another, by sensible marks.
> That the sensible marks necessary to answer this purpose, can not possibly be mere words, might fully be proved by a philosophical disquisition into their nature [...]. It is certain that we have given names to many of these emotions [...]. But the use of these names is not to stand as types of the emotions themselves, but only as signs, of the simple or complex ideas, which are formed of those emotions[53].

*True signs of passions* are tones and gestures, which are expression of *the language of passions (or emotions)*[54]. Tones, in particular, are «expressive of sorrow, lamentation, mirth, joy, hatred, anger, love, pity, &c.» and are the same «in all nations, and consequently can excite emotions in us analogous to those passions, when accompanying words which we do not understand». The power of tones is so strong that «the very tones themselves, independent of words, will produce the same effects, as has been amply proved by the power of musical imitation. And tho' these tones are usually accompanied with words [...], yet the whole energy, or power of exciting analogous emotions in others, lies in the tones themselves»[55].

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[53] *Ibid.*, p. 99.

[54] *Ibid.*, p. 101. Sheridan's theory includes two *kinds of language*, namely *the language of ideas* and *the language of passions, or emotions*: «The one is, the language of ideas; by which the thoughts which pass in a man's mind, are manifested to others; and this language is composed chiefly of words properly ranged, and divided into sentences. The other, is the language of emotions; by which the effects that those thoughts have upon the mind of the speaker, in exciting the passions, affections, and all manner of feelings, are not only made known, but communicated to others; and this language is composed of tones, looks, and gesture» (*Ibid.*, pp. 132-133).

[55] *Ibidem.*

Tones may express feelings and emotion, whereas words express contents and ideas. Tones are even more important than words, because «words are limited to their peculiar office, and never can supply the place of tones; yet tones, on the other hand, are not confined to their province, but often supply the place of words, as marks of ideas»[56]. The Author is absolutely convinced of the superiority of tones in conveying information and feelings: the Chinese language is, in his opinion, the most perfect demonstration of his theory. In fact,

> The Chinese language is chiefly made up of tones, and the same individual word shall have sixty different meanings, according to the different tones in which it is pronounced. Here then it is clear, that fifty nine of the sixty ideas, are marked by tones; for the same individual word, pronounced exactly in the same manner, can not possibly by itself, be a clear and distinct mark, for more than one idea[57].

Unfortunately, there is no further reference to the functions of intonation and prosodic features throughout Sheridan's work. He was a great innovator, however, in depicting the use of language not merely «to communicate ideas, but also all the internal operations, emotions, and exertions, of the intellectual, sensitive, and imaginative faculties of man»[58]. Sheridan's ideal delivery was to be characterized by *grace and naturalness*. When he began his work, Cicero and Quintilian were his frame of reference in the elocutionary field, but later he created his own categories; he reached a large audience through his lectures and his books and practiced brilliantly his own art.

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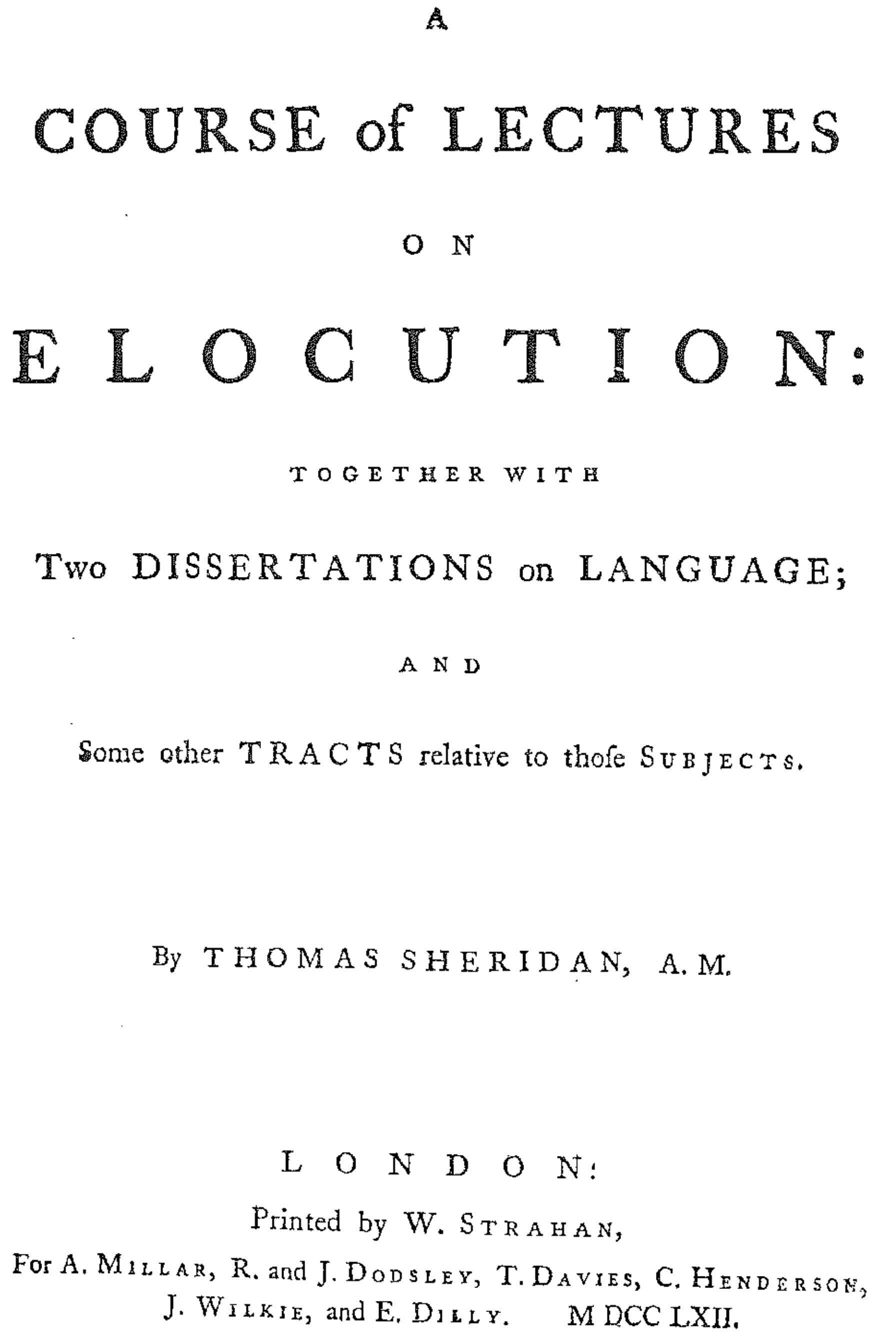
[56] *Ibid.*, p. 108.

[57] *Ibidem.*

[58] *Ibid.*, p. 110.



A

COURSE of LECTURES

ON

ELOCUTION:

TOGETHER WITH

Two DISSERTATIONS on LANGUAGE;

AND

Some other TRACTS relative to thoſe SUBJECTS.

By THOMAS SHERIDAN, A. M.

LONDON:
Printed by W. STRAHAN,
For A. MILLAR, R. and J. DODSLEY, T. DAVIES, C. HENDERSON,
J. WILKIE, and E. DILLY. M DCC LXII.

Fig. 3.8 – Frontcover of *A Course of Lectures* (1762)

### 3.4. *The nineteenth century*

At the end of the eighteenth century many of the most important problems of intonation had been sketched out, although most of them were still not recognized as such. Kenneth Pike, at the end of a short historical introduction to his intonational analysis of American English, summarizes the main points of the seventeenth and eighteenth prosodic studies and suggests a list of interesting questions, that we shall propose here. Each question corresponds to one intonational problem discussed by one or more authors among those that we have studied in the previous chapters.

> Is intonation important to communication, or is it something which can safely be ignored (Hart)? [...] Can the intonation be divided up into two or more general pitch schemes (Butler), or is a more complicated system necessary for description (Steele)? [...] Is pitch unimportant and practically nonexistant in English because it is not lexical as in Greek (Monboddo) or is nevertheless highly significant (Steele)? Does the pitch act primarily on syllables (Steele) or is it spread over words and sentences (cf. Monboddo)? Should the pitch be represented like music (Steele), or by a few marks for the general trend of the voice (Walker)? Does the pitch of English function like mere animal cries (Sheridan), or like the dull beating of a drum (Monboddo), or like extremely intricate music (Steele), or in extremely simple tunes slightly modifiable (Butler, Walker)? Is intonation independent of grammar or caused by it or accompany it in some specific relationship (cf. Steele versus Walker)? Should the attention be placed upon a full analysis, regardless of practicability of writing (Steele), or should an attempt be made to a full analysis to be made to indicate a few pitch curves, only, by a limited number of symbols for use by students (Walker), or left as punctuation (Butler)? Finally, should the analysis of English intonation be prepared for the native or for the foreigner (cf. Hart's discussion of both uses of the phonetic alphabet, f. 5, p. 1-2)?[59].

Apparently, it seems that at the beginning of the twentieth century all had already been said about intonation. In fact, the major intonational problems had been recognized centuries before. George Faure, in his *Recherches sur les caractères et le rôle des éléments musicaux dans la prononciation anglaise*, seems to agree with Pike on this point. In a chapter devoted to English intonation, he says:

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[59] K. Pike, *The Intonation of American English*, cit., pp. 4-5.

> Il semble bien que dès la fin du XVIIIe siècle l'étude de l'intonation anglaise ait non seulement retenu l'attention d'authentiques chercheurs, mais les ait aussi amenés à poser, souvent en termes excellents, tout un ensemble de problèmes qui font encore l'objet de travaux et de discussions, et même à proposer à leur sujet des essais de solution qui ne seraient pas déplacés dans des ouvrages beaucoup plus récents[60].

Nineteenth century studies on English intonation did not generate new – or at least original – ideas in the field. Nevertheless, it is in this century that the interest in intonation and prosody increased enormously both in England and in America. In Great Britain linguists concentrated on the debate between supporters and accusers of Steele's theories, whereas in the U.S.A. the first studies on the functions of intonation in oral communication took root.

### 3.4.1. *Towards a science of speech*

Steele's work did not have great success when he published it. The reviews of his *Prosodia Rationalis* were very sceptical about his 'musical' transcription of the oral language. An anonymous writer of the nineteenth century wrote:

> Even admitting that, in the rise and fall of speaking, the voice does run the divisions up and down the very few notes within the compass contended for, the oratorical melody of the Greek tongue being confessedly lost, and the application of it, or the substitution of any thing equivalent to the English, being attended with great, if not insuperable difficulties, it may be worth considering, whether it would not be better to give up all thoughts of it entirely, and make the suppression of such variation the distinguishing characteristics of *speaking*, as opposed to *singing*[61].

In other words, if English could not achieve the accomplishments of Greek, it was better give up the attempt altogether. No compromise was allowed: either English had all the properties of a classical tongue, or it was preferable to abandon the few it did have. In any case, intonational studies were considered useless, being motivated by a vain aesthetic intent to maintain a certain 'elegance of speech'.

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[60] G. Faure, *Recherches sur les caractères et le rôle des éléments musicaux dans la prononciation anglaise (Essai de description phonologique)*, cit., p. 19.

[61] The review is published in: P.K. Alkon, *Joshua Steele and the Melody of Speech*, «Language and Speech», II/3, 1959, pp. 167-168. Here we quote from: *Ibid.*, p. 168.

Two months later, however, another anonymous writer declared in *The Critical Review* that Steele's *application* of musical notation to the task of transcribing speech was something 'new'[62] and underlined its value. From that moment on, Steele's contributions to the study of English intonation were given their right weight, till the phonograph was invented. In fact, when technology produced machines able to record the human voice, *Prosodia Rationalis* failed to achieve its purpose, and was forgotten.

Of the few who did remember Steele's importance, Thelwall, Roe[63] and Odell[64], Ellis[65] and Storm[66] must be cited. We shall consider now two works in particular: *An Essay on the Elements, Accents and Prosody of the English Language* by Odell and *Speech and Song* by Ellis.

### 3.4.1.1. James Odell

In 1806 Odell, one of Steele's most faithful followers, published *An Essay on the Elements, Accents, & Prosody of the English Language,* as a confirmation of his teacher's theories. In the chapter *English Accents* the Author described some keywords, such as *tone, pitch, accent, melody,* and their etymology. He reconsidered the works of some of his ancestors: Walker's *Melody*, Sheridan's *Lectures* and, of course, Steele's *Prosodia Rationalis*. Steele's volume is his own main reference book, even though his position towards Steele's thought is not without reservations. In particular, he is critical of Steele's idea of 'pause'. In fact, Steele assumed the existence of eight different subdivisions of quantity, corresponding to the musical notes from a quaver to a dotted semibreve, and to their equivalent pauses. On the contrary, according to Odell,

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[62] Anon., *Review of Steele's Prosodia Rationalis,* «The Critical Review, or Annals of Literature by A Society of Gentlemen», 41, 1779, p. 212.

[63] For a discussion on this topic see: T.S. Omond, *English Metrists*, Oxford University Press, Oxford 1921.

[64] J. Odell, *An Essay on the Elements, Accents and Prosody of the English Language; intended to Have Been Printed as an Introduction to Mr. Boucher's Supplement to Dr. Johnson Dictionary*, Lackington-Allen, London 1806.

[65] J.A. Ellis, *Speech and Song,* s.e., London 1877, quoted in M.L. Barker, *Joshua Steele on Speech Melody,* «The Modern Language Review», 3, 1924, pp. 169-174; P. Alkon, *Op. Cit.*, pp. 172-174.

[66] J. Storm, *Englische Philologie*, s.e., Leipzig 1892, quoted in M.L. Barker, *Op. Cit.*, p. 171.

> no measures, whether of sound or silence, in prose or verse, can be regulated by arbitrary computations: nor can such diversities of measures, as Mr. Steele assumes, be ever realised in practice. [...] *Notes may be sounded in exact proportions of time,* [...]. In speaking, we know (and for our knowledge we are indebted to Mr. Steele himself) that *the voice is in continual motion, ascending and descending, not always indeed with equal velocity, but always very rapidly, through intervals of limited extent*[67].

As a consequence, Odell disagreed with Steele's definition of *quantity*, too. Not so did Ellis, who acknowledged *Prosodia Rationalis* to be «the classical work on the time and cadence of English speech», commenting on «the rarity and value of his [Steele's] book»[68].

### 3.4.1.2. Alexander Ellis

In 1876, a hundred years after the publication of *Prosodia Rationalis,* Ellis published an essay on the English rhythm, entitled *Speech and Song,* where the difference between oral and musical performances was described in the following terms:

> In speech, pitch is uncertain, unsustained, and 'gliding' through several pitches but slightly differing from each other. In song, pitch is (or should be) quite certain, sustained, and rarely gliding off to another pitch[69].

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[67] J. Odell, *Op. Cit.*., pp. 154-155 (my italics). For a discussion on the concept of *pause* see: C. Adams, *English Speech Rhythm and the Foreign Learner,* Mouton, The Hague 1979, pp. 28-30.

[68] A.J. Ellis, *On the Physical Constituents of Accent and Emphasis,* «Transactions of the Philological Society», 113, 1873-1874, pp. 129-132.

[69] J.A. Ellis, *Speech and Song,* in M.L. Barker, *Op. Cit.,* p. 171. See also: J. Storm in *Englische Philologie* (1892), quoted in *Ibidem:* «Die Töne der Sprache sind durch ihre flüchtige Natur von den wahren musikalischen unterschieden, sie sind Gleittöne. Im Gesang verweilt die Stimme eine bestimmte, messabre Zeit auf jedem Tone».

The Author was totally indebted to Steele's theories, as he recognized some years later:

> Steele attended to length and silence in one, under the name of time, and distributed them so as to divide speech, in prose or verse, into equal intervals of time, answering to musical *bars*; he especially noted pitch, and also force, not however, as here employed, but as part of expression, and hence forming part of weight, and corresponding to the crescendos and diminuendos of music, and in fact the whole apparatus of oratory. What is here meant by force he calls weight, and makes it agree completely with the beating of a conductor of music, that he assignes weight to silences[70].

It will be observed that Ellis emphasizes Steele's postulate of periodicity, omitting any mention of his independent apparatus for indicating relative duration.

As a matter of fact, Ellis became more and more interested in the intonational functions, and not only in the description of prosodic phenomena. Consequently, he found some American studies in the field – especially James Rush's and Melville Bell's researches – absolutely innovative[71].

### 3.5. *The beginnings of the 20th century*

Independently of the discussions about rhythm and metre taking place in Britain in pamphlets and scholarly journals, at the end of the nineteenth century there began to be developed an awarenes of the importance of intonation, especially in the context of language teaching. The need to provide materials which would be both useful to teachers and adequate guides to prosodic features led some phoneticians to write descriptive and teaching manuals of intonation.

The earliest work in this field was that of Henry Sweet. Sweet's general phonetic training made him fully aware of prosodic effects and voice qualities other than intonation in English (*breath, voice, whisper, glottal stop, stage whisper or wheeze* among the *throat sounds; clearness, dullness, nasality, wheeziness, gutturality* among the *voice qualities).* Developments in transcriptions came early: Paul Passy first used a system of lines and curves, whereas Daniel Jones continued to use a musical notation in his *Intonation Curves.* A system of notation was devised by Harold Palmer: he stressed the need to distinguish the functional units of intonation, called *head, nucleus* and *tail.* Moreover, he adopted a new transcription: his intralinear transcription – that is, within the line of text – replaced the traditional interlinear one.

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[70] J.A. Ellis, *Mr. Alexander J. Ellis Remarks on Professor Mayor's Two Papers on Rhythm*, in P. Alkon, *Op. Cit.*, p. 172.

[71] A complete bibliography on this subject is given in: A.G. Kennedy, *A Bibliography of Writings on the English Language from the Beginning of Printing to the End of 1922*, Harvard University and Yale University Presses, Cambridge and New Haven 1927.

The approach begun by Palmer had at least two important followers: Roger Kingdon, who introduced the subdivisions of *pre-head and body* within the concept of head[72], and Maria Schubiger, who gave a certain amount of space to the attitudinal variants of English intonation[73]. On the contrary, Jones's studies were the basis of Lilias Armstrong and Ida Ward's classification of tunes according to grammatical structures[74].

In the first half of the twentieth century the work of these scholars was decisive in forming a theoretical perspective and a methodology for further study. However, after this early activity, there was a pause in the production of new textbooks and approaches to the subject: the 'new' ideas took time to be assimilated, and the Second World War had a general *stultifying effect*[75]. Only after the war, did the 'industry of teaching English' develop: this required new teaching materials and new data of a more conversational kind. Since then, the British approaches to intonation have shown a marked similarity in principles, as well as in notation, and this may have been due to a reaction against the American theories, which "phonemicised or morphomicised" intonation[76].

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[72] See chapter 2.2. of this volume.

[73] M. Schubiger, *English Intonation, its Form and Function*, Niemeyer, Tübingen 1958.

[74] L.E. Armstrong, I.C. Ward, *Handbook of English Intonation,* B.G. Teubner, Berlin 1926.

[75] The expression is adopted by David Crystal in his *Prosodic Systems and Intonation in English (*cit.), p. 37.

[76] The expression is borrowed from *Ibid.,* p. 39. The Author complains here about the absence of «any *comprehensive* description of the forms of intonation used in English» adopted by the contemporary British school of intonational studies. He thinks that «much of the available material is selective and oversimplified, due to the pressing demands of a

### 3.5.1. *Henry Sweet*

Sweet's main concern throughout all his intonational research was pedagogic. Since he was both phonetician and teacher of English as a foreign language, he described the studying of phonetics as *the indispensable foundation of language.* Thus did he write in 1877:

> Without a knowledge of the laws of sound change scientific philology – whether comparative or historical – is impossible, and without phonetics their study degenerates into a mere mechanical enumeration of letter changes[77].

When Sweet started writing about intonation, the subject was still considered 'new'. In his preface to *A Handbook* we read:

> It need hardly be said that many of the statements in this book [...] will require careful examination by others before they can be either fully received or rejected. The whole subject of intonation, especially, requires to be thoroughly investigated by a thoroughly competent observer, which I am very far from being, my natural aptitude and my training being equally defective. It is in this branch, in the *study of voice-timbre and of synthesis* generally, that the work of future phoneticians must be concentrated[78].

A knowledge of intonation – and sentence stress as a consequence – is not only an essential part of elocution and pronunciation, but is also an integral part of the syntax. Each language reveals its own particular relationship between intonation and grammar. So, for example:

> In such a language as English each tone has a general signification, and may be applied to any word indifferently. Thus by a simple inflexion of the voice a single word will often express what in other languages could only be adequately stated in a complete sentence. We may therefore call this kind of tone a *sentence-tone.* The Greek tones on the other hand are strictly *word-tones;* each word has but one tone,

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pedagogical context – a state of affairs which is perfectly understandable when seen in its historical setting, but which is none the less undesiderable. The lack of any complete guide to intonation naturally resulted in a great deal of personal impressionism, and the making of vague frequency judgements».

[77] H. Sweet, *A Handbook of Phonetics,* Clarendon Press, Oxford 1877, p. III.

[78] Id., *A New English Grammar, Logical and Historical,* Part I, Oxford at the Clarendon Press, Oxford 1900-1931, p. X (my italics).

> which is absolutely inherent in it, being as much an essential part of it as its consonantal or vowel structure[79].

The grammatical function of intonation is often underlined by Sweet, especially when he studies the syntax of English questions.

> We can see how *intonation* shows the relation between words by comparing such a sentence as *you are ready?*, uttered with a rising tone, with the same sentence uttered with the falling tone of such a sentence as *I am ready.* While the falling tone expresses statement, the rising tone expresses question, so that the rising tone in *you are ready?* has the same meaning as the change of word-order in *are you ready?*[80]

Intonation is studied in terms of *inflections,* which may be of five kinds:

- *level*
- *rising*
- *falling*
- *compound rising* (that is, *falling-rising*)
- *compound falling* (that is, *rising-falling*)[81].

Inflections may proceed by sudden *leaps* or regular *glides.* These two different changes of tones make the difference between musical intonation and oral intonation. In fact,

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[79] Id., *On Danish Pronunciation,* cit. in E.J.A. Henderson, *Op. Cit.,* p. 179.

[80] Id., *A New English Grammar,* I, cit., p. 31.

[81] Unfortunately, there is no clear definition of the words *intonation, pitch, tone* and *key* in Sweet's writings. In *A Handbook* (pp. 93-96) the expressions 'variations of pitch' and 'variations of tone' are interchangeable. *Changes of pitch* is synonym of *changes of tone* also in: H. Sweet, *A History of English Sounds* (1888), cit. in E.J.A. Henderson, *The Indispensable Foundation. A Selection from the Writings of Henry Sweet,* Oxford University Press, London 1971, p. 178. Again, in *A Handbook* (cit., p. 96), the word *key* is introduced as a synonym of *pitch*: «Besides the separate inflections of which it is composed, each sentence, or sentence-group, has *a general pitch, or 'key'* of its own» (My italics). Cfr. also: Id., *A New English Grammar...,* cit., p. 229: «When excited, we speak in *a high pitch or key*; when depressed, *in a low key*» (my italics).

> In singing the voice dwells without change of pitch on each note, and leaps upwards or downwards to the next note as quickly as possible, so that although there is no break, the intermediate 'glide-tone' is not noticed. In speech the voice only occasionally dwells on one note, but is constantly moving upwards or downwards from one note to the other, so that the different notes are simply points between which the voice is constantly gliding[82].

Almost all the oral performances are based on *voice-glides,* constantly moving upwards and downwards; only occasionally will the voice «dwell on any one note»[83]; producing a *voice-leap.* Voice-glides and voice-leaps are different in different languages. In English the tones express various logical and emotional modifications, such as surprise, uncertainty, etc. but in some other languages there is a tendency to employ one predominant tone without much regard to its meaning. Sweet recognizes that, for example, «in Scotch the rising tone is often employed monotonously, not only in questions but also in answers and statements of facts. In Glasgow Scotch the falling tone predominates. In American English the compound rise is the characteristic tone»[84].

Sweet's pedagogical concern plays an important role here. The main problem will be, according to him, that of recognizing the grammatical functions of intonation, more than the problem of recognizing the different kinds of inflections. If intonation has a different function in different languages,

> How do such languages express these general ideas (interrogation, affirmation, etc.), which is the function of the English tones to express?[85]

The Author does not give an answer to his question, which works as a provocation to his followers. Daniel Jones was one of the first who tried to give an answer.

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[82] Id., *A Handbook...,* cit., p. 93.

[83] *Ibidem.*

[84] Id., *A Handbook...,* cit., p. 94.

[85] Id., *A New English Grammar,* cit., p. 179.

### 3.5.2. *Daniel Jones*

«Jones was a superb teacher, and his staff in the Department were all superb teachers. Great importance was attached in the Department's teaching to *performance* [...]. *General* phonetics as such was hardly ever taught; matters of general theory were discussed only if they arose in connection with these»[86]. With these words David Abercrombie celebrated his great teacher, while reconsidering fifty years of studies in phonetics[87]. Daniel Jones, one of the most important English phoneticians of the twentieth century, one of the first supporters of the *applied phonetics,* dignified intonation as a *"branch of the phonetic science"*. This is one of the reasons why he wrote, in april 1909, the first book entirely devoted to intonation, entitled: *Intonation Curves*[88].

When he started writing, he was conscious that intonation had not «*hitherto met with adequate treatment in books on pronunciation* owing to the want of a satisfactory method of indicating these variations». At that time he looked for a simple and clear description and 'transcription' of the intonation contours and criticized his ancestors' too complicated *accurate records*[89]. Ten years later, in *An Outline of English Phonetics,* he still insisted on the fact that «accurate curves [...] have scientific value, but their usage in practical language teaching is limited, since they only record what is objectively present. To get good results in practical teaching it is necessary to have regard continually to the intonation *aimed at,* i.e. the intonations which are *subjectively* present to the speaker. These often differ considerably from the objective intonations actually employed»[90]. By *objective intonation* the Author referred to the pure physical qualities of this prosodic feature, whereas by *subjective intonation* he meant the speaker's performance at the intonational level.

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[86] D. Abercrombie, *Daniel Jones's Teaching,* in Id. ed., *Fifty Years in Phonetics. Selected Readings,* Edinburgh University Press, Edinburgh, p. 39.

[87] Id., *Fifty Years...,* cit.

[88] D. Jones, *Intonation Curves,* B.G. Teubner, Leipzig and Berlin 1909, p. IV (My italics). Cfr. also Id., *The Pronunciation of English*, Cambridge University Press, Cambridge 1956 (4th edit.) for a similar treatement of English intonation.

[89] D. Jones, *Intonation Curves.*, cit., p. IV.

[90] Id., *An Outline of English Phonetics*, Cambridge University Press, Cambridge 1918, p. 326. In the same book we read about *Experimental Methods:* «The apparatus used in elementary experimental phonetics includes the artificial palate, the phonetic kimograph, the laryngoscope, X-ray photography, sensitive flames, tape recorders and other reproducing machines. In more advanced work use is made an apparatus for enlarging the

It is the *subjective side of intonation* which makes the entire intonational phenomenon so difficult to be described. In terms of 'transcription' then, great care should have been taken to render the 'curves' as accurate as possible. The Author reminded his reader of the fact that «it is not claimed that the curves are absolutely *accurate*, like those obtained by measuring vibrations. In fact in the method here used there are several obvious sources of error. Such inevitable errors are however very slight and *are of no consequence from a practical point of view* (my italics)»[91]. Imperfect though his method could be, Jones was sure that his possible errors would be «immeasurably more than counterbalanced by the advantage of having long and easy legible texts not occupying an inordinate amount of space, coupled with curves on a scale which is familiar to everyone – an arrangement which is hoped may prove helpful not only to phonetic specialists, but also to teachers of languages and teachers of elocution»[92].

Supported by his convictions, he chose to adopt a musical notation, both in *Intonation Curves* and in the two first editions of *An Outline*[93]. In *Intonation Curves*, in particular, his notation was applied to three long texts in three different languages (English, French, and German)[94]. Here it is the description of how he worked:

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curves on records, cathode ray oscillographs, harmonic analysers, spectrographs and much other apparatus. It is not necessary for the purposes of this book to say much about experimental methods, beyond giving palatograms of various sounds» (*Ibidem*, p. 17).

[91] *Ibid.*, p. X.

[92] *Ibidem.*

[93] Jones's book has seen nine editions: the first was published in 1918, the last in 1960. We are referring here to the first edition. The third edition (Teubner, Leipzig 1932) had new pages and was modified especially in chapter XXXI (on intonation); the seventh edition (Teubner, Leipzig and Heffer, Cambridge 1949) contains a new chapter on American pronunciation; the eighth (Heffer, Cambridge 1956) is enriched by twenty new pages on the *Types of Phonetic Transcription*.

[94] The recorded passages are: *Passage from Shakespeare's Richard II, Poe's The Bells, Conversation from Langenscheidt's English, Passage from Rostand's La Samaritaine, Lafontaine's Le Corbeau et le Renard, and Le Loup et l'Agneau, Conversation from Barlet and Rippman's French Life and Ways, Passage from Schiller's Wallenstein, Passage from Goethe's Faust.*

> If while a gramophone record is being played the needle is lifted from the revolving disc, the ear retains the impression of the sound heard at the instant when the needle is lifted. If the record is of the speaking voice and the needle is removed in the middle of a voiced sound, the ear retains in particular the pitch of the musical note which the voice is producing at that instant; this may be marked on some kind of musical stave. By taking observations at a large number of points in a sentence and joining the points by lines, a complete intonation-curve of the sentence results[95].

Certain small inaccuracies were unavoidable with this method, although it had the advantage that while a considerable degree of scientific accuracy was attained, yet «*the resulting curves [were] such as can be made use of without difficulty in practical language teaching*»[96]. The phonetic text resulted to be continuous (not irregularly spaced as in the case of the most accurate curves), and the ordinary musical stave made the values of the curves clear enough to anyone who had an elementary knowledge of music.

Only in 1932, at the time of the third edition of *An Outline*[97], did Jones find a new satisfactory way of transcribing intonational phenomena: it was the method created by Lilias Armstrong and Ida Ward in their *Handbook of English Intonation*[98]. It was during that year that he produced a more exhaustive analysis of intonation, both on the theoretical and the pragmatic point of view. He analysed carefully the entire bibliography on the subject[99] and arrived at his own definition of the terms *intonation* and *stress*.

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[95] Id., *An Outline...*, cit., p. 325.

[96] *Ibidem*. My italics.

[97] *Ibid.*, p. 279.

[98] L.E. Armstrong, I.C. Ward, *Handbook of English Intonation*, B.G. Teubner, Leipzig-Berlin 1926.

[99] Jones's references on the subject are: L.E. Armstrong, I.C. Ward, *Handbook of English Intonation*, cit.; H.O. Coleman, *Intonation and Emphasis*, "Miscellanea Phonetica I to Commemorate the 25th Year of 'Le Maître Phonétique'", 1914, pp. 6-26; R. Kingdon, *Tonetic Stress Marks for English*, "Le Maître Phonétique", International Phonetic Association, University College, London, 54, 1939, pp. 60-4; Id., *The Teaching of English Intonation*, "English Language Teaching", II/4, II/5, II/6, e III/1, 1954; Id., *The Groundwork of English Intonation*, Longmans, Green & Co., London 1959; H. Klinghardt,

> *Intonation* may be defined as the variations which take place in the pitch of the voice in connected speech, i.e. the variations in the pitch of the musical note produced by the vibration of the vocal cords[100].

> *Stress* may be described as the degree of force with which a sound or a syllable is uttered. It is essentially a subjective action. A strong force of utterance means energetic action of all the articulating organs; [...] it involves a strong 'push' from the chest wall and consequently strong force of exhalation; this generally gives the objective impression of loudness[101].

Intonation may be *rising, falling or level.* Rising and falling intonations are represented by curves, whereas the level intonation is indicated by dots, to be distinguished from the bigger points used to indicate stress. These signs are put inside a three-lines musical stave. The transcription reminds of Armstrong and Ward's system, who simplified intonational theory reducing it to two essential tunes, called *tune I* and *tune II: tune* I is falling and it is typical of assertions (*ordinary, definite, decided statemets), wh-* questions, exclamations, and orders; *tune II* is rising and it is used in *yes-no* questions, *polite requests,* and in all the statements which are not so definite as in the case of tune I. The analysis of these Authors had the advantage of emphasizing some resemblance of meaning or usage in all rising (or falling) pitch contours; this could be particularly useful to foreign students.

Jones appreciated Armstrong and Ward's work and found it so clear that he applied it to his own intonational analysis. The result was his distinction between:

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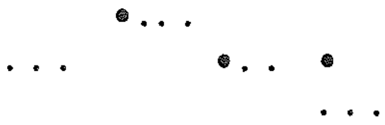
*Sprechmelodie und Sprechtakt,* N.G. Elvert, Marburg in Hessen 1923; H. Klinghardt, G. Klemm, *Übungen in Englischen Tonfall,* Quelle and Meyer, Leipzig 1926$^2$; J.D. O'Connor, *The Intonation of Tag Questions in English,* "English Studies", XXXVI/3, 1955, pp. 97-105; Id., *English Intonation Course,* Radiotjänst, Stockholm 1956; H.E. Palmer, *English Intonation with Systematic Exercises,* Heffer, Cambridge 1922; Id., *Everyday Sentences in Spoken English,* Heffer, Cambridge 1927$^3$; H.E. Palmer, G. Blandford, *Everyday Sentences in Spoken English,* W. Heffer, Cambridge 1922; M. Schubiger, *The Role of Intonation in Spoken English,* Heffer, Cambridge 1935.

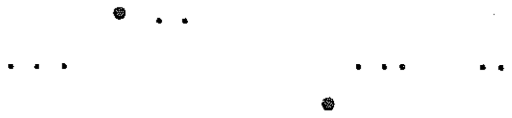
[100] D. Jones, *An Outline...*, cit., p. 275.

[101] *Ibidem*, p. 245.

*tune I (normal form)*



*tune II (normal form)*



His description of intonation may seem even too simple. As a matter of fact, teaching intonation was Jones's primary intent. The demands of English-language teaching in the early decades of the twentieth century produced sometimes partial descriptions which, in absence of sufficient theoretical and descriptive research, regularly involved oversimplification and misinterpretation. But this is not the case. Jones's writings always avoided misleading and impressionistic statements, recurred to statistical support, and finally tried to fight against any form of unscientific impressionism that all too often resulted in oversimplification of a complex linguistic situation, or in partial truths the student or the teacher might too readily generalize.

### 3.5.3. *Harold Palmer*

The framework for describing the forms of intonation in the British tradition is largely in the *contour* tradition (cfr. Chapter 2.2. of this volume), that is in the development of intonational researches into three main areas:

1. the division of connected speech into *intonation-groups;*
2. the selection of one syllable within one word in each intonation-group to bear the principal accent, or *nucleus,* or *tonic;*
3. the choice of a tune within the intonation-group *(intonation-tone).*

The foundation of the so-called British *nuclear approach* was given by Harold E. Palmer[102].

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[102] For a discussion on this topic see chapter I.3 of Robert Ladd Jr Thesis (D.R. Jr Ladd, *The Stucture of Intonational Meaning,* PhD Thesis, Cornell University, University Microfilm International, London 1978). While describing the main topics of the British vs the American school of intonation, the Author says (pp. 13-26): «Since the mid-thirties,

In 1924 he published *English Intonation*, where he introduced the terms *nucleus, head, tail*[103]. The Author started from the apparently obvious idea that «*we all recognize immediately and without effort each of the attitudes associated with the tones*; we use them and respond to them, we express or conceal our thoughts by choosing the tone or tone compound most likely to serve our purpose»[104]. In his opinion English speakers do all this with such complete unconsciousness that most of them are convinced either that there is no tone-system in English, or that there are tones but no system, or that the English tone-system is very elementary.

The pedagogical intent is very strong in Palmer's work. The book is, in fact, «especially designed [...] for the use of foreign students of spoken English».[105] The student who wishes to use the English language 'in the manner of English speakers' cannot ignore the phenomena of its intonation and pronunciation. The two things, pronunciation and intonation, are so closely connected that it is useless to teach or learn one without the other.

The theoretical part of the volume is entirely devoted to teachers' training. They should be teachers of *oral English*, and know perfectly the segmental and prosodic foundations of the English language. We quote from the book:

> A teacher of pronunciation cannot do efficient work if he is ignorant of the nature (nay, of the very existence) of the sounds of the language he is teaching; but to teach foreigners to pronounce English without teaching them to intone is an unbalanced procedure. And yet a teacher of intonation cannot do efficient work if

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following Palmer 1922, it has become usual to divide the 'tune' into at least two parts, the part preceding the sentence stress (usually called 'the head') and the remainder, consisting of the 'nucleus' (the syllable with sentence stress) and optionally a 'tail' (any syllables after the sentence stress)».

[103] H.E. Palmer, *English Intonation with Systematic Exercises*, Heffer & Sons, Cambridge 1924.

[104] *Ibid.*, p. VIII. My italics. Against this statement G. Faure says: «[...] il est bien certain que cette maîtrise intuitive des tons [...] aboutit rarement à une notion claire et objective [de *ton*], comme c'est, en effet, beaucoup plus facilement le cas lorsqu'il s'agit des phonèmes [...]. La grande difficulté que nous éprouvons à définir objectivement les tons, fût-ce les tons de notre langue, tient, selon nous, essentiellement à ce que nous ne disposons, pour les analyser, d'aucune base articulatoire précise qui puisse nous servir de référence» (G. Faure, *Op. Cit.*, pp. 53-54).

[105] H. Palmer, *Op. Cit.*, p. V.

> he is ignorant of the nature (nay, of the very existence) of the tones of the language he is teaching[106].

The teacher is a sort of *performant* that the student will then imitate. *Imitation* is the starting point of the process of language learning. The foreign student will be taught to discover the tones which are *unfamiliar* to him, because they are not used in his/her own language.

The most interesting and innovative part of Palmer's work is the theoretical description of the so-called *tone-group*. It is defined as a *word or series of words in connected speech containing one and only one maximum prominence*[107]. Each tone-group contains one nucleus, that is one stressed syllable on the most prominent word (sometimes called also *sentence stress).* Each nucleus may be followed by a *tail,* or preceeded by a *head (inferior, superior, scandent, or heterogeneous).*

In British English there are four typical *nucleus tones:*

- *falling* ↘
- *high-rising* ↗
- *falling-rising* ↘↗
- *low-rising* _↗

One tone-group corresponds to each nucleus-tone, as it follows:

- *Tone-group 1:* falling nucleus-tone
- *Tone-group 2:* high-rising nucleus-tone
- *Tone-group 3:* falling-rising nucleus-tone
- *Tone-group 4:* low-rising nucleus-tone

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[106] *Ibid.,* p. VI.

[107] *Ibid.* p. 7.

In *A Grammar of Spoken English* Palmer improved this classification, describing the intonation of British English in terms of:

1. two falling tones: *high-falling,* and *low-falling*
2. two rising tones: *high-rising,* and *low-rising*
3. one rise-fall-rise tone[108].

The analysis of the functions of each tone-group is even more interesting than the description of its form[109]. The functions of each kind of tone-group are:

- *Tone-group 1 (falling)*

It covers a wide range of functions, from «categoric statements having a conclusive or final character» (namely, *answer to questions, contradictions, announcements),* to *wh- questions,* commands.

- *Tone-group 2 (high-rising)*

It is mainly used for *yes-no questions,* but it sometimes appears in *wh-questions* which have been already asked and answered (the so-called 'repeated questions'), or in statements implying doubt, hesitation, or uncompleted thought.

- *Tone-group 3 (falling-rising)*

It is difficult to define one precise function of this tone. It is used exclusively for statements and orders, never for questions. It seems to express some contrast, often indicated with *but, although, even if, but all the same, etc.*

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[108] Id., *A Grammar of Spoken English on a Strictly Phonetic Basis,* Heffer and Sons, Cambridge 1939$^2$, p. 14.

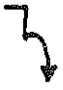
[109] *Ibid.*, pp. 72-86.

- *Tone-group 4 (low-rising)*

Palmer defines it as *a reassuring intonation*. It seems to convey the idea of perfect agreement between the hearer and the speaker, or to have «a calming or soothing effect on the hearer».

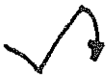
In *A New Classification of English Tones(*1933)[110] Palmer reconsidered the tonal classification published ten years before. He realized that the tone-groups described in *English Intonation* were too difficult to be used for a pedagogical aim. For this reason, he created a system of six fixed combinations of tones, coupled with original names, which could be easily remembered. The six *tone patterns* typical of the English language are listed in *A Grammar of Spoken English* in the following order[111]:

1. *cascade* (superior head + low-falling nucleus-tone)



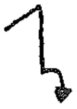
It is the most frequent. It is used for suggestions *(let's go there together),* orders *(come and sit down), wh-* questions *(where does he live?),* rhetorical questions.

2. *dive* (inferior head + high-falling nucleus-tone)



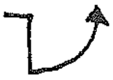
It is the intonation of assertions (*it isn't Joe's; it's mine!);* it often used in imperative sentences, especially in emphatic forms (*if you don't like doing it,* ***don't*** *do it!);* some particular questions require it *(never mind where I was, where were* ***you****?).*

3. *jump* (scandent head + low-falling nucleus-tone)



Exclamations usually adopt this intonation to intensify the strength of the word which represents the nucleus (*how strange! What a large one!).*

4. *wave* (superior/inferior head + high-rising nucleus-tone)



It is the intonation of *yes-no questions* (*did you do that?)* and echo questions, in which the subject answers to a question in such a surprised way that he repeats the question itself (for example: someone asks in a regular *tone-pattern I*: *What is it?*, and someone else answers with astonishment: ***What is it?*** = *surely you know what it is without asking!)*[112].

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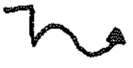
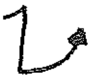
[110] H.E. Palmer, *A New Classification of English Tones,* Institute for Research in English Teaching, Tokio 1933.

[111] *Ibid.,* pp. 18-25. The Author of the examples in italics is Palmer.

5. *snake* (superior head + rising-falling-rising nucleus-tone) 

According to Plamer, this is the most difficult tone to describe, from a functional point of view. It is always used in an affirmative or imperative sentence but it implies the idea of opposition, or concession. Three examples:

- *that is not what I mean (although it may be what you mean)*
- *I don't say I wanted to go (but I had to go)*
- *don't come too late (even if you come a little late)*[113].

6. *swan* (scandent head + low-rising nucleus-tone) 

It is similar to the *tone IV* described in *English Intonation.* It has a *reassuring* function.

Palmer's classification was not very successful. The six tones were considered too complicated to be taught. Nevertheless, the volume *A New Classification of English Tones* had great diffusion and was adopted as *the* English textbook in Japanese secondary schools until the sixties.

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[112] See also the so-called *repeated questions,* «i.e. a request for the repetition of the answer to a question previously asked by a speaker and answered to another person» (*ibid.*, p. 22).

[113] If we make a comparison of the same *tone-pattern* in different languages we shall notice that: «This tone [...] corresponds in meaning to what has to be expressed in other languages by specific words or collocations, e.g. (French) *tout de même, en effet;* (German) *doch, ja, eingentlich;* (Japanese) *yahari, yappary*» (*Ibid.*, p. 23, n. 1).

CHAPTER FOUR

# AMERICAN HISTORICAL FOUNDATIONS

## 4.1. *The seventeenth century*

There is no reference to the study of voice and intonation in the United States during the seventeenth century. Of course, theoretical and educational works in speech must have received only little attention in the early days of building a nation in the wilderness. If there was any interest in speech training, it was confined to the few rhetoricians who were concerned with teaching their arts to the very few college students[1]. Little effort can be discovered on the other side of the Atlantic before the nineteenth century: the printing and publication of books began early in the colonies, but it was very poor.

> Massachusetts in 1639 and Pennsylvania in 1685 were the leaders. The first spelling book bears the date of 1643 and the *New England Primer* appeared sometime between 1687 and 1690. R. Aiken, of Philadelphia, printed Burgh's *Art of Speaking* in 1775. This is listed as 'fourth edition', but no earlier U.S. publication is discoverable. It was first published in 1761[2].

Nevertheless, as far as intonational studies are concerned, neither their development nor the part they played in speech education in the centuries which followed can be understood without a glance at American education and culture prior to 1800.

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[1] For a discussion on this topic see: C.T. Simon, *Development of Education in Speech and Hearing in 1920,* in K.R. Wallace, *History of Speech Education in America,* Appleton-Century-Crofts Inc., New York 1954, p. 415, n. 33: «Rhetoric was included in the earliest educational programs. The first laws of Harvard College (1643) made provision for rhetorical study and practice; rhetoric (of Latin) was required in the courses of the colleges founded before 1730. The Spy Club for students speaking was founded at Harvard in 1719. English declamation was introduced at Yale in 1751; Pennsylvania had a Professor of English and Oratory as early as 1753».

[2] *Ibidem,* n. 34.

Clearly, the dominant influence in the development of American linguistic and phonetic theory came from England. The growth of 'indigenous' studies on the English language was slow and its first fruits came only at the end of the nineteenth century. During the colonial and revolutionary years, the only sources we have for suggestions on the usage of voice and the study of prosodic features are some books on classical rhetoric or on elocution.

### 4.1.1. *The field of classical rhetoric*

Rhetorical education in America was based essentially on the classical writings on the subject, especially on the works of Aristotle, Cicero and Quintilian. It is through their writings that American scholars became acquainted with the concept of 'delivery', the fifth traditional rhetorical canon, later on referred to as 'the Art of Speaking'[3].

In particular, Cicero and Quintilian both recognized 'delivery' and its importance in speeches: although neither of them dealt directly with the relationship between the speaker and the audience, they both noted how speaking may be affected by variations in the voice and body movements. As a consequence, they stressed the necessity for proper sounds and gestures in meeting the situational demands of rhetoric. The word used by the great Roman authorities to name this part of rhetoric was *pronuntiatio* or *actio*. We read in Cicero:

> Pronuntiatio est ex rerum et verborum dignitate vocis et corporis moderatio (*De Inventione,* 1.7.9)
> Cumque esset omnis oratoris vis ac facultas in quinque partes distributa; ut deberet reperire primum, quid diceret; deinde inventa non solum ordine, sed etiam momento quodam atque iudicio dispensare atque componere; tum ea denique vestire atque ornare oratione; post memoria saepire; *ad extremum agere cum dignitate ac venustate* (*De Oratore,* 1.31.142. My italics).

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[3] *Invention, arrangement, style, memory and delivery* are the five traditional rhetorical canons (in Latin: *Inventio, Dispositio, Elocutio, Memoria, Pronuntiatio).* For a clear and simple definition of the canons, see: J.L. Golden, G.F. Berquist, W.E. Coleman, *The Rhetoric of Western Thought,* Kendall/Hunt, Dubuque 1997 (6th edit.), pp. 44-54.

> Est enim actio quasi sermo corporis, quo magis menti congruens esse debet (*De Oratore,* 3.59.222).

Quintilian uses the same words used by Cicero with the same meaning:

> Pronuntiatio a plerisque actio dicitur, sed prius nomen a voce, sequens a gestu videtur accipere (*Institutio Oratoria,* 11.3.1).

In English, 'pronunciation' had been established since the early sixteenth century as the technical term for the oral delivery of discourse. Only when the science of phonetics began to emerge did the term acquire a new technical meaning[4]. In 1617 Robert Robinson wrote *The Art of Pronunciation*[5], a treatise on phonetics, describing in detail "the elements and parts of the voice" together with the main problems of spelling and pronunciation. Unfortunately, this book was considered a work on voice and gesture for years, because in Robinson's time the art of pronunciation would technically have referred to the art of delivering a speech. William Phillips Sandford said of it, for example, that it was «probably the first book written in English devoted exclusively to the subject of delivery»[6]. In the eighteenth century, the dangers involved in having two different technical meanings for the same word may have worried the British elocutionists, who were the first to withdraw the term 'pronunciation' from its setting in rhetoric and to use it in an unambiguous technical sense in lexicology and phonetics.

If the difference between 'delivery' and 'pronunciation' is now clear, it is nevertheless not easy to understand why the word 'elocution' was chosen by British, and then, by American elocutionists to name the fifth part of rhetoric. This is a problem widely discussed by Wilbur Samuel Howell in his tribute to *The British Elocutionary Movement (1702-1806)*:

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[4] For various instances where 'pronuntiatio' has been rendered into English as 'pronunciation', see: W.S. Howell, *Logic and Rhetoric in England, 1500-1700,* Russell & Russell, New York 1961, pp. 81-82, 89, 104, 112, 255-256, 325.

[5] Robinson's work is reproduced in: E.J. Dobson ed., *The Phonetic Writings of Robert Robinson,* Oxford at the Clarendon Press, Oxford 1968$^2$, pp. 200-214.

[6] W.S. Howell, *Eighteenth-Century British Logic and Rhetoric,* Princeton University Press, Princeton 1971, p. 148.

> After all, was not elocution already recognized in England as the term for the lore of the tropes and figures and for the doctrine of the three kinds of style? If so, how was a new ambiguity to be avoided when the term was made also to mean oral delivery? [...] The elocutionists could have avoided this sort of confusion, of course, by calling the fifth and last part of rhetoric by the alternate name of *action,* as classical authorities would have authorized, or by the new term *delivery,* as the twentieth century was going to do[7].

As a matter of fact, these rhetoricians refused both the term 'action', because it could be associated in English with the idea of 'gesture' (physical motion) rather than of 'oral utterance', and the term 'delivery', probably because it had no roots in that Latin rhetorical tradition of which they were proud.

Only in the eighteenth century would the word 'elocution' finally be used in its full present meaning: traditionally connected with rhetoric, this term was a close relative of 'eloquence'. Thomas Sheridan, one of the most influential British elocutionists[8], employed this word in its 'new' sense in 1756, translating it directly from the Latin 'pronuntiatio' in the well-known passage taken from *Rhetorica ad Herennium:* «*Elocution* is a graceful management of the voice, countenance, and gesture»[9].

We shall start now with a short discussion of the idea of 'delivery' in the U.S. in the seventeenth century in order to present intonation as one of its features. We shall then consider the role of the voice in the study of American Elocution in the eighteenth century. The chapter will end with a description of the incidence of the intonational process in speech studies and communicational theories during the nineteenth century.

### 4.1.2. *The Ramistic School*

The French philosopher Pierre de la Ramée (1515-1572), better known by his Latin name Peter Ramus, is one of the most representative figures of the European Renaissance rhetorical theory[10]. One of his most noted writings is *Dialecticae Libri Duo,* written in 1555 but first translated into English in 1574[11]. Fifty-eight years later, in 1642, at the time of the first Commencement at Harvard, Ramistic rhetoric had already become the dominant pattern of rhetoric and culture in New England.

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[7] *Ibid.,* pp. 149-150. My italics.

[8] Cfr. Chapter 3.3.1.3.

[9] T. Sheridan, *A Course of Lectures on Elocution...*, cit., p. 158.

The Latin version was: "Pronuntiatio est vocis, vultus, gestus moderatio cum venustate" *(Rhetorica ad Herennium,* 1.2.3.).

Ramus redefined rhetoric as the study of style and delivery only. The content and subject matter traditionally considered as parts of 'invention' and 'arrangement' were placed by him into the domain of dialectic.

> Under logic or dialectic, he [Ramus] argued, belonged the canons of invention and disposition. Since rhetoric, on the other hand, should not be permitted to share the same subject matter, it should consist merely of style and delivery. Although Ramus is not the originator of the idea that rhetoric should be limited to style and delivery, he proved to be such a popular and influential persuader that he won the devotion of numerous followers who proclaimed him as a seminal thinker[12].

In his *Arguments in Rhetoric against Quintilian,* Ramus clarifies his position against classical rhetoric:

> The whole of dialectic concerns the mind and reason, whereas rhetoric and grammar concern language and speech. Therefore dialectic comprises, as proper to it, the arts of invention, arrangement, and memory; this is evident because, as

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[10] By 'Renaissance rhetorical theory' we mean the major trends in Rhetoric developed in the years roughly between 1400 and 1600 A.D., i.e. the years of the Italian Renaissance. This proved to be an exciting time for the development of rhetorical thought. During the two hundred years of the Renaissance, «the entire body of Greek rhetorical literature became accessible to the West, both through the original texts and through Latin and vernacular translators [...]. To the theoretical treatises on rhetoric we must add the actual products of ancient Greek oratory» (P.O. Krysteller, *Rhetoric in Medieval and Renaissance Culture,* in J.J. Murphy ed., *Renaissance Eloquence: Studies in the Theory and Practice of Renaissance Rhetoric,* University of California Press, Berkeley 1983, pp. 4-5).

[11] F. Pierrepont Graves, *Peter Ramus and the Educational Reformation of the Sixteenth Century,* Macmillan, New York 1912. For a discussion of Ramus' philosophy of rhetoric, see: W.S. Howell, *Ramus and English Rhetoric: 1574-1681,* in «Quarterly Journal of Speech», 37, 1951, pp. 299-310; Id., *English Backgrounds of Rhetoric,* in K.R. Wallace, *Op. Cit.,* pp. 28-33.

[12] J.L. Golden, G.F. Berquist, W.E. Coleman, *Op. Cit.,* p. 128.

> we find among numerous dumb persons and many people who live without any outward speech, they belong completely to the mind and can be practiced inwardly without any help from language or oration. To grammar for the purposes of speaking and writing well belong etymology in interpretation, syntax in connection, *prosody in the pronunciation of short and long syllables,* and orthography in the correct rules for writing. From the development of language and speech only two proper parts will be left for rhetoric, style and delivery; rhetoric will possess nothing proper and of its own beyond these[13].

The Ramistic pattern of rhetoric and dialectic constituted the dominant theory of communication in the U.S. from the seventeenth century on. Not only did it break from the 'classics' but also it determined a new perspective in education. In fact, the separation of the classical canons of rhetoric still exists today: whereas logic is traditionally taught in philosophy departments, rhetoric is studied in speech, communication, and English departments in most of the American colleges and Universities[14].

We shall not go any further on a subject which might well deserve an independent study. From our limited point of view, what makes the Ramistic school significant in this historical survey is that it established a consistent framework in which the Elocutionary Movement, that we are going to study in the next pages, could mature and develop[15].

### 4.1.3. *The Baconian School*

One of the forces working against the Ramistic school of thought at the end of the seventeenth century had been set in motion by the publication of Francis Bacon's philosophical writings. We do not want here to reconstruct his theories, just as we did not want to discuss Ramism in our previous paragraph: this is neither the right place to do so, nor are we interested here in any philosophical discussion. Nevertheless, we are once again concerned with the influence his ideas had on eighteenth and nineteenth centuries elocutionists.

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[13] P. Ramus, *Arguments in Rhetoric Against Quintilian (1549),* transl. by C. Newlands, in P. Bizzell, B. Herzberg ed., *The Rhetorical Tradition: Readings from Classical Times to the Present,* Bedford Books, Boston 1990, p. 570. My italics.

[14] J.L. Golden, G.F. Berquist, W.E. Coleman, *Op. Cit.*

[15] A century before the Elocutionists became famous, Charles Butler (see chapter 3.2.1.1. of this volume) was an important figure in the history of Ramistic theory. For a discussion on this topic see: W.S. Howell, *English Backgrounds of Rhetoric,* in K.R. Wallace ed., *Op. Cit.,* pp. 32-33.

Bacon (1561-1626) was an English philosopher, a lawyer, and a scientist[16]. Great innovator of Western thought, he is often described as 'the greatest poet of science' and 'the herald of the scientific movement': he recommended to his contemporaries «a total reform of human knowledge, a true advancement of learning, and a revolution in the conditions of life»[17]. Convinced that progress was an inherent principle of life, he wrote in 1605 a philosophy of optimism in his first monumental work, entitled *The Advancement of Learning.* The book received four editions in English and one in Latin from 1605 to 1642 and it was not only a reaction to Ramistic rhetoric but also the signal of a new future for the theory of communication.

Bacon considered *delivery* as part of the *Art of Elocution or Tradition,* that is the art of "expressing or transferring our knowledge to others"[18]. The terms 'Style and Delivery' of Ciceronian rhetoric became the single term 'Tradition', which stood for «the process of communication, to which grammar, logic, and rhetoric make their distinctive contributions»[19] and it is one of the so-called *Intellectual Arts*. Here are his own words:

> The Arts Intellectual are four in number; divided according to the ends whereunto they are referred: for man's labour is *to invent* that which is *sought or propounded;* or to *judge* that which is *invented;* or *to retain* that which is *judged*; or to *deliver over* that which is *retained.* So as the arts must be four; Art of Inquiry or Invention; Art of Examination or Judgement; Art of Custody or Memory; and Art of Elocution or Tradition[20].

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[16] An updated synthesis on Bacon's thought about language and linguistic evolution is given in: P. Tornaghi, *Francis Bacon e l'origine del linguaggio,* in C. Milani ed., *Origini del linguaggio. Frammenti di pensiero,* Demetra, Colognola ai Colli (VR) 1999, pp. 164-186.

[17] H.C. Dick ed., *Selected Writings of Francis Bacon,* The Modern Library, New York 1955, p. X.

[18] *Ibidem.*

[19] W.S. Howell, *English Backgrounds of Rhetoric,* in K.R. Wallace ed., *Op. Cit.,* p. 35.

[20] F. Bacon, *The Advancement of Learning,* quoted in *Ibidem.*

In Bacon's analysis, rhetoric contributes to Tradition by supplying knowledge of the means by which thoughts may be vividly represented to man's imagination. The duty of rhetoric is «to apply Reason to Imagination for the better moving of the will»[21]. In other words, rhetoric becomes the means by which man appeals to the Imagination and, with the support of Reason, can control the Will.

## 4.2. *The eighteenth and nineteenth centuries*

As we underlined in chapter *4.1. (American Historical Foundations: The seventeenth century),* there is no explicit reference to the form and function of intonation and to prosodic features in the United States till the ninenteenth century. Nevertheless, we think that the foundations for the most recent studies on the subject must be looked for inside the American rhetorical tradition of the eighteenth and nineteenth-century elocutionists.

### 4.2.1. *The study of elocution: British sources*

As a modern study, elocution originated in England in the eighteenth century. Training in elocution became a need especially for the clergy, often criticized for their colourless reading; on the other hand, the seventeenth-century growing interest in the English language had brought increased attention towards all its aspects, both written and spoken. The Elocutionary movement was a direct outgrowth of the main seventeenth and eighteenth century linguistic trends. All the greatest English lexicographers, grammarians and, in some way, phoneticians of these two centuries have left us wonderful pages on voice management and elocution.

The word 'elocution' was chosen to indicate 'the art of delivery'. As we underlined previously[22], it was a word traditionally connected with rhetoric, and a close relative of the word 'eloquence'. It could perfectly replace the ancient Latin word *pronunciation*, too limited in scope, or the modern word *delivery,* of French origin (fr. *Délivrer,* 'to set free')[23].

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[21] *Ibidem.*

[22] Cfr. chapter 4.1.1.

The printed page, the voice, language and the body supplied the material upon which the movement brought to bear philosophy, rules, principles and notation. In devising ways to analyse these materials the elocutionists used the precepts of ancient rhetoric as well as the practices of the stage. They generally referred to their subject as *an art* during the whole of the eighteenth century, but with the beginning of the new century the subsidiary subjects investigated became nearer to 'science', in the sense that elocution tended to be concerned with speech correction, with the anatomy of vocal physiology, and with the physics of sound production. Only nineteenth-century elocutionists, such as Thelwall and Bell, looked upon elocution as a 'science'.

Scientific or artistic, their contributions concentrated on three main fields: bodily action (modifications of facial expressions, manner and attitude, movements of arms and legs); voice management (vocal flexibility, control, and buoyancy through proper use of accent, emphasis, force, rhythm, tone, pause, pitch); pronunciation (identification and production of speech sounds, standard vs dialectal variations, first studies on the anatomy of speech mechanisms). All these writings aimed at improvement in delivery, together with the development of a taste for culture and quality.

The American movement may best be understood by an examination of the British books on the subject which were studied in the U.S. There were hundreds published, but we shall distinguish here three main categories: investigative treatises, manuals designed for use in different professions, and books for school and home use.

#### 4.2.1.1. Investigative treatises

They are volumes which contained the substance of the elocutionary ideas and established the subject. They were often records of research that made contributions to human knowledge in the field of the human voice. Two books we have already referred to in Chapter Three can be reconsidered here: Thomas Sheridan's *A Course of Lectures on Elocution* (1762), and *The Melody of Speaking* (1787) by John Walker. However, at least three other authors would deserve a quotation: John Mason, James Burgh and Alexander Melville Bell.

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[23] Referring to the word 'delivery', Frederick W. Haberman underlines the fact that: «the term later achieved currency in the language of law, of sport, of physical deportment, and, by 1806, in the language of rhetoric, although there are scattered examples of its use in this sense before this date» (F.W. Haberman, *English Sources of American Elocution,* in K.W. Wallace ed, *Op. Cit.,* p. 113).

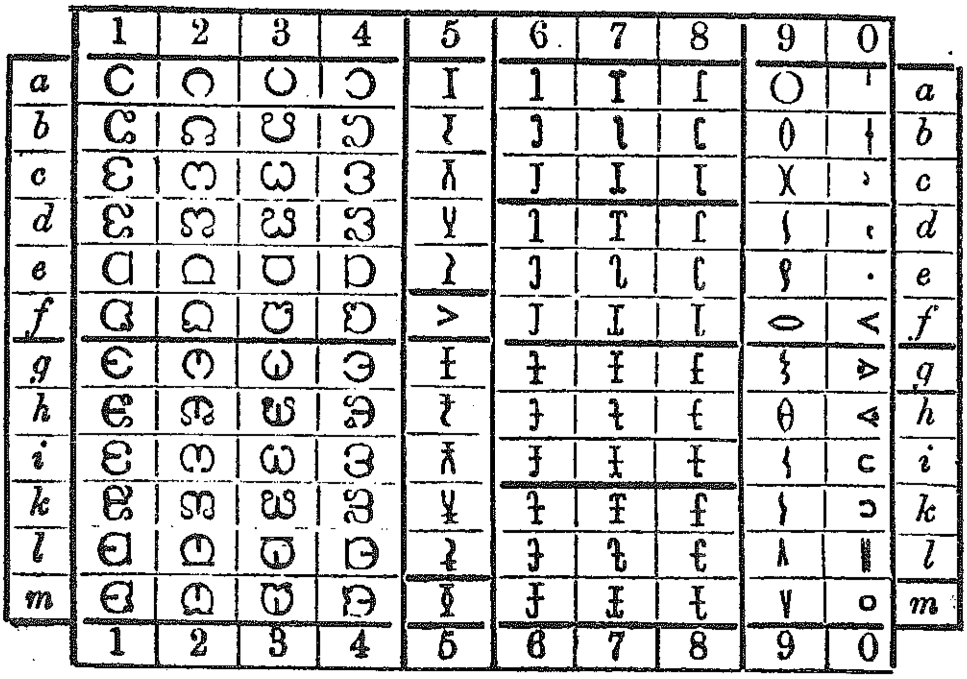
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Fig. 4.1 – Bell's *Visible Speech* Letters
(Source: A.J. Ellis, *On Early English Pronunciation*, vol. I, Asher & Co., London & Berlin 1869, p. 15).

John Mason's *An Essay on Elocution, or Pronunciation* (1748) is a short work which deals with «the right management of the voice in reading or speaking»[24]. The Author defines reading as the expression of «the full Sense and Spirit of Your Author», and speaking as something

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[24] J. Mason, *An Essay on Elocution, or Pronunciation (1748)*, The Scolar Press, Menston 1968, p. 5.

«suitable to the nature and Importance of Sentiments we deliver»[25]. He develops this thought in two sections: *Section I* describes what he means by 'bad pronunciation' and how a reader, or a speaker, can avoid it; *Section II* deals with 'good pronunciation' and the way to attain it. As all the elocutionists, by 'pronunciation' Mason means the 'art of speaking' in general. Therefore, his books contains some general advice on how to «make the Ideas seem to come from the Art» (in other words, on natural and spontaneous speaking), together with some elementary prescriptive rules on rhythm which remind us of Hart's words (cfr. 3.1.1.1.), when he says that:

> A Comma stops the Voice while we may privately count *one,* a Semi-colon *two;* a Colon *Three;* and a Period *four*[26].

There is no explicit reference to intonation in the rest of the book.

James Burgh was a successful writer on political philosophy. He wrote his only book on oratory in 1761, entitled *The Art of Speaking*[27]. The book is divided into two Parts: *Part I* is an essay «in which are given Rules for expressing properly the principal passions and Humors, which occur in Reading, or Public Speaking»[28]; *Part II* is an anthology of readings, with glosses referring to the 'passions' defined in the essay. The volume contains directions to the students on the vocal management of certain types of sentences, some general observation on oratory, and an exposition of physical demeanour in depicting seventy-six different 'humours and passions'. This last part is particularly striking: the Author describes here how the principal expressions are indicated by attitudes, looks, gesture, and language. As far as *despair* is concerned, for instance:

> Despair [...] bends the eyebrows downward; clouds the forehead; rolls the eyes around frightfully; opens the mouth towards the ears; bites the lips; widens the nostrils; gnashes with the teeth, like a fierce wild beast[29].

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[25] *Ibid.*, p. 22.

[26] *Ibid.*, pp. 23-24.

[27] J. Burgh, *The Art of Speaking (1761),* University Microfilms, Ann Arbor (Michigan) 1953.

[28] *Ibid.*, quoted from the title page.

[29] *Ibid.*, p. 173.

Burgh held the central idea, eagerly accepted by the elocutionists, that physical features (such as the eyes, the mouth, the entire face and the voice itself) are capable of projecting every 'emotion of the mind' into its 'proper outward expression'. Burgh's thought had great success both in England, where his book had at least seven editions, and in the United States, where eight reprintings were made. *The Art of Speaking* was read by Sheridan, paraphrased by Walker, anthologized by Scott, quoted by Austin, and recalled in one way or another by elocutionists for over a century[30].

Alexander Melville Bell was one of the most famous phoneticians and elocutionists of the nineteenth century[31]. In his forty-nine publications, he touched on almost every part of the so-called 'science of elocution'. However, his most original contribution was his study on vocal production. In this area, he was particularly concerned with the discovery of the physiological means by which each speech sound is produced, the scientific classification of these sounds and the usage of a 'notation' that would include a symbol for every sound. His task was to find a rational basis upon which to build a system of symbols. He started describing the physiological positions of the articulatory organs while producing sounds and to determine which sounds corresponded to each position; then, by modifying in a systematic way each of the 'articulators' in turn, he obtained different sounds which formed a concatenated progression; at this moment he could account for any sound produced by the human voice. The symbols which could represent the actions of the organs forming the sounds were widely described in *Visible Speech,* written in 1867[32], the influence of which was enormous on its followers: the book became the basis of the International Phonetic Alphabet (I.P.A.). Bell described the various inflexions in two other volumes, particularly concerned with elocution (*The Elocutionary Manual,* written in 1959, and

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[30] For a discussion on Burgh's success see: F.W. Haberman, *Op. Cit.,* p. 115.

[31] The number of books written by the Bell family is notable. The Bell we refer to is Alexander Melville, son of Alexander, brother of David Graham Bell and father of Alexander Graham Bell: the first three wrote books on phonetics, all of which had sections on prosody, the last invented the telephone.

[32] A.M. Bell, *Visible Speech,* Simpkin & Marshall, London 1867.

*The Emphasised Liturgy,* dated 1866)[33]: the basic division was into falling and rising intonation, but the two kinds of intonation were in turn divided into simple and compound versions (the latter being rising-falling and falling-rising), all having high and low 'modes'; rise-fall-rise and monotone were also mentioned.

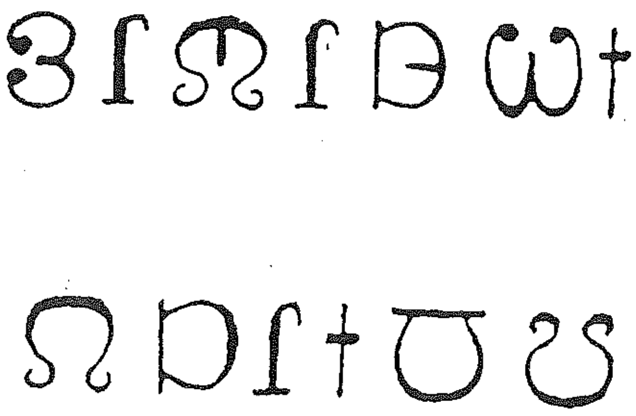

Fig. 4.2. – The Words *Visible Speech* in the Handwritten Symbols developed by Bell (Source: R.K. Potter, G.A. Kopp, H.C. Green, *Visible Speech,* D. Van Nostrand Company Inc., New York 1947, p. 3)

### 4.2.1.2. Professional manuals

During the eighteenth and nineteenth centuries, a second group of texts was used and studied in the U.S. to improve the correct usage of the voice and intonation, especially in public reading and speaking: we refer to those manuals designed for use in different professions. Most of them were written for the clergy. They were small volumes of easy consultation, very concise and clear in theoretical explanations, full of precious suggestions and advice for the reader. There emerges a lesson on the typical gestuality of conversation and public speaking on the one hand[34], and on the main prosodic features on the other: posture, hands, eyes and voice are as important as the content of words and sentences. As for the voice in particular, intonation, stress and emphasis are the main subjects to be practiced, usually with the help of a musician.

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[33] Id., *The Elocutionary Manual,* Hamilton, Adams & Co., London 1859; Id., *The Emphasised Liturgy,* Hamilton, Adams & Co., London 1866.

It seems that the first to provide the elocutionary theories to the church service was Anselm Bayly, in his two books: *A Practical Treatise on Singing and Playing (1771)* and *the Alliance of Musick, Poetry and Oratory (1789)*[35].

Two other manuals deserve a quotation: John Wesley's *Directions (1770)* and James Wright's *The Philosophy of Elocution (1818)*[36]. Wesley's small book (only a dozen pages) gives some examples of what Mason explained in his *Essay on Elocution,* whereas Wright's big volume (two hundred pages are devoted only to voice management) is a sort of paraphrase of Sheridan's thought and an adaptation of the kind of notation created by Walker. A third volume should be included in this short list of publications for professional elocution: it is *Garrick's Mode of Reading the Liturgy of the Church of England,* written by Richard Cull in 1840[37].

#### 4.2.1.3. Books for school and home use

There were hundreds of manuals of elocution published between 1750 and 1900 which were intended for use in schools and for personal use. They usually had an introductory text and an anthology of passages for reading. Although the purposes which animated the authors of these manuals were different, three were – according to Haberman – the main objectives they wanted to achieve:

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[34] G. Austin, *Chironomia; or a Treatise on Rhetorical Delivery: Comprehending Many Precepts, Both Ancient and Modern, for The Proper Regulation of the Voice, the Countenance, and Gesture. Together with an Investigation of the Elements of Gesture, and a New Method for the Notation Thereof: Illustrated by Many Figures (1806),* Southern Illinois University Press, Carbondale (Illinois) 1966, quoted in J.L. Golden, G.F. Berquist, W.E. Coleman, *Op. Cit.,* pp. 133-140.

[35] For complete references and a description of the form and contents of these small volumes see: F.W. Haberman, *Op. Cit.,* p. 119.

[36] J. Wesley, *Directions Concerning Pronunciation and Gesture,* printed by William Pine, Bristol 1770; J. Wright, *The Philosophy of Elocution (London, 1818),* quoted in F.W. Haberman, *Op. Cit.,* p. 119. At least two other titles should be suggested here, as a comparison with Wesley's production and Wright's writings: J. Henley, *The Art of Speaking in Public,* N. Cox, London 1727$^2$; J. Rice, *An Introduction to the Art of Reading with Energy and Propriety,* J. & R. Tonson, London 1765.

[37] F.W. Haberman, *Op. Cit.,* p. 120.

> The first of these was the acquisition of elocutionary effectiveness: delivery of discourse with distinct and pleasing articulation, graceful modulation, and decorous demeanor. A second purpose, overlaid, to be sure, on the first, was the inculcation of moral excellence. Towards the end of the period under consideration [i.e. *the Nineteenth Century*], there was an increasing number of authors who laid claim to the teaching of moral precepts and respectable conduct. Likewise a third purpose appeared with more and more frequency: the development of a taste for culture and quality[38].

The format of these books, well exemplified by the selected elocutionary exercises created by Thelwall in 1812[39], was particularly successful in the United States. Works such as *The American Elocutionist,* written in 1851 by William Russell, or *The Science and Art of Elocution* by Frank H. Fenno (1878), or *The Speaking Voice (1897)* by K. Benkhe, or *The Orator's Manual (1879)* by George Raymond[40] are the American version of the first 'didactic' manuals of elocution written in Great Britain.

### 4.2.2. *The American 'Elocutionary Art'*

In the history of English language and linguistics, the analysis of a non-written suitable style in communicative situations appears sporadically before the end of the 19th century, but finally the American Elocutionary Movement focused on the power of oratory, of eloquence, and of *effective speech.* It is precisely in this *power* that we find the 'roots' of the modern American interest on intonation and prosodic features: the American Elocutionists' manuals are – especially from a pragmatic point of view – much more original and interesting than those produced a century before by their British ancestors in the English schools of elocution. A synthesis of the most important names and some references for both the American and the British schools of elocution are given in fig. 4.4.

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[38] F.W. Haberman, *Op. Cit.,* p. 122.

[39] J. Thelwall, *Selections for the Illustrations on The Rhythmus and Utterance of the English Language,* J. McCreery – A. Cornhill, London 1812.

[40] F.H. Fenno, *The Science and Art of Elocution; or, How to Read and Speak (1878),* Books for Libraries Press, New York 1970; K. Behnke, *The Speaking Voice,* Curwen & Sons, London 1897; W. Russell, *The American Elocutionist,* Jenks, Palmer & Company, Boston 1851; Id. *Pulpit Elocution,* W.F. Draper and Bro., Andover 1853; G.L. Raymond, *The Orator's Manual (1879),* G.P. Putnam's Sons, The Knickerbocker Press, New York and London 1910.

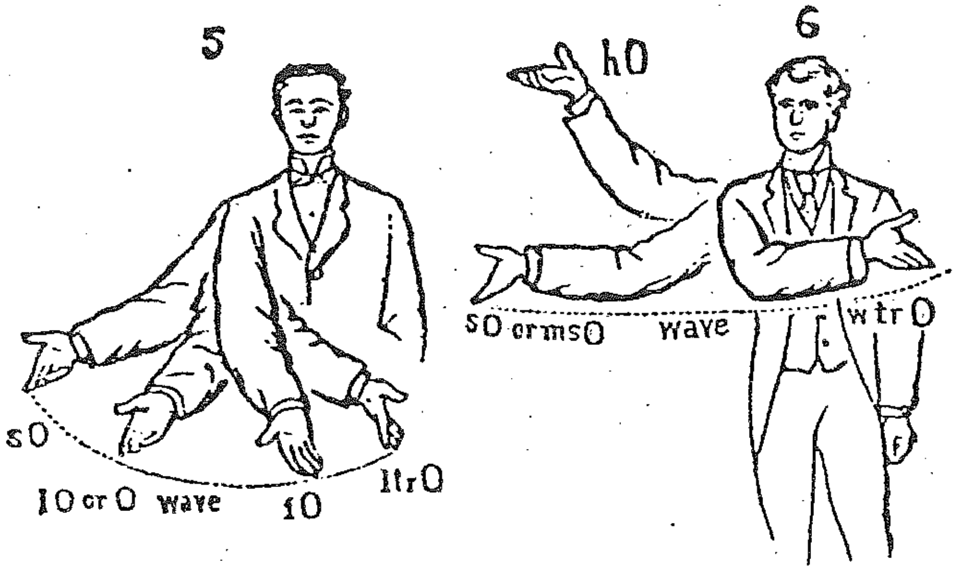

Fig. 4.3a – Gilbert Austin's *Chironomia* (1806)

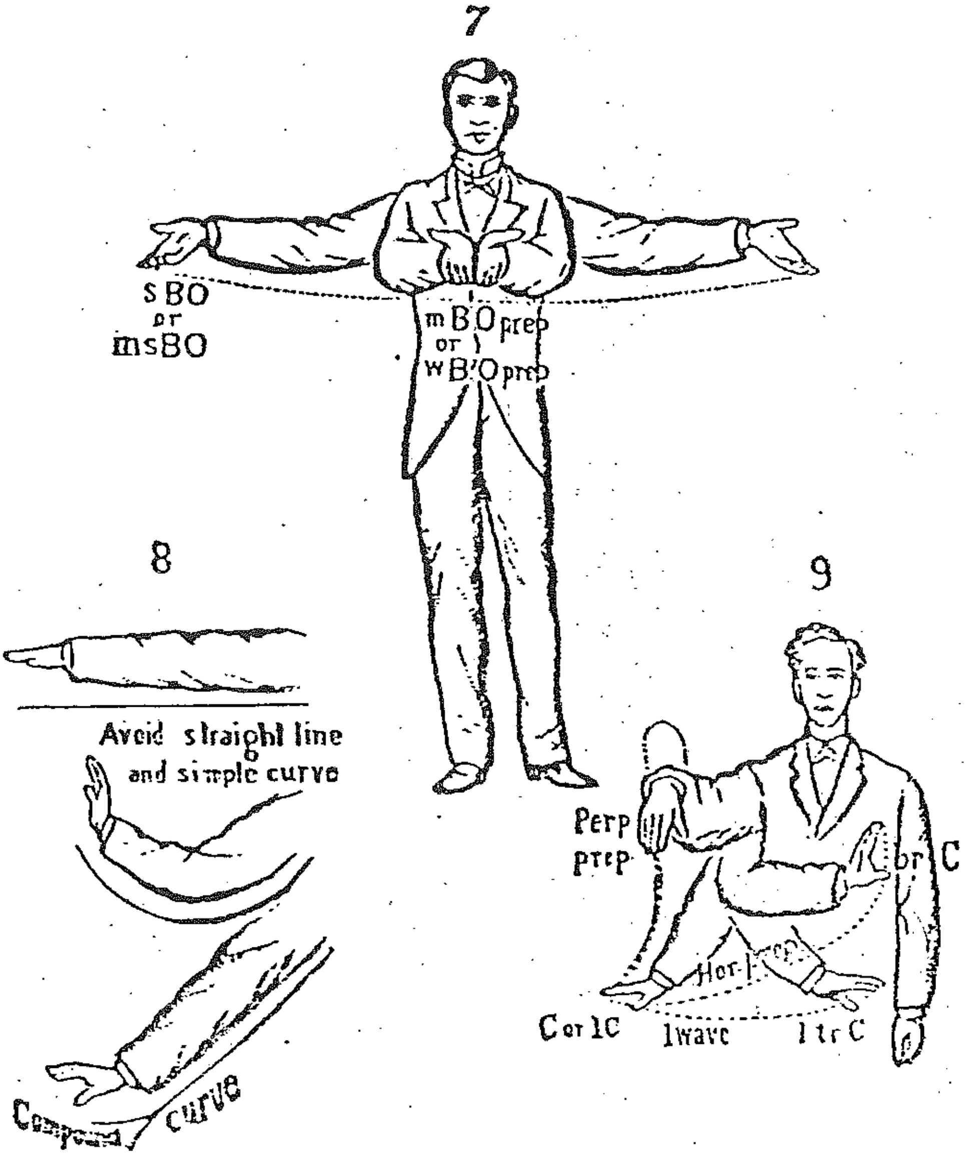
7
S BO
or
msBO
mBOprep
or
wB'Oprep
8
Avoid straight line
and simple curve
Compound curve
9
Perp
prep
or C
Hor
C or 1C
1wave
1trC

Fig. 4.3b – Gilbert Austin's *Chironomia* (1806)
Austin's complicated method of teaching delivery and its strong impact on the elocutionary movement can be appreciated especially in the visual drawings he used. Here are two of the eleven 'plates' he used to depict appropriate posture, the right positions of the arms and hands, and complex significant gestures. The plates, in all, contain 122 separate items. (Source: J.L. Golden, G.F. Berquist, W.E. Coleman, *The Rhetoric of Western Thought*, pp. 137-140)

**BRITISH SCHOOL**

1. **investigative treatises:**
   **Mason (1748),**
   **Burgh (1761),**
   **Sheridan (1762),**
   **Walker (1787),**
   **Melville Bell (1867).**
2. **manuals designed for use in different professions;**
   **namely, manuals for clerical elocution:**
   **Wesley (1770),**
   **Wright (1818),**
   **Cull (1840).**
3. **books for school and home use (Thelwall 1812).**

**AMERICAN SCHOOL**

1. **From medicine:**
   **Rush (1893);**
   **Barber (1830);**
   **Comstock (1837; 1844).**
2. **From the theatre circuit**
   **(more than fifty companies scattered throughout the United States in 1850):**
   **Boston**
   **New Orleans**
   **California.**
3. **From the clergy:**
   **Rev. Chapman;**
   **Rev. Bryant;**
   **Rev. Porter.**

Fig. 4.4 – British and American Schools of Elocution

In general, the work of British rhetoricians was eagerly accepted in America. The demand for elocution in this country being as great as – or even greater than – in England, it is not surprising that British elocutionists found there ‘the’ market for their publications.

The Elocutionary Movement in America takes its direct origin from the British school of Elocution and until the second half of the nineteenth century shows little originality. The first elocutionary studies were apparently well accepted in the U.S. during the eighteenth century as readily as in their native land, but developed even more assiduously in the next century. The Americans, in the early stages of the movement's history, republished British authors, copied them, sometimes modified and adapted their teachings to their situations. They finally created a U.S. movement «which possessed attributes of independence as well as adaptation»[41].

*Desire for education* and *the wish to be entertained* contributed to the elocutionists' success. Many people, often trained for professions such as medicine or the theatre, became 'teachers of elocution' in response to a growing demand for training in this field; their personal background was often vital to the scientific knowledge of the vocal system, and of the most suitable teaching methods, as a consequence.

One of the greatest elocutionists of the nineteenth century, James Rush (the author of *The Philosophy of the Human Voice,* 1893), was a doctor; Jonathan Barber (who wrote *A Grammar of Elocution* in 1830) worked as a physician while teaching elocution at Harvard and Yale; Andrew Comstock (*Practical Elocution* 1837; *A System of Elocution* 1844) did the same[42].

Rush, in particular, made a very detailed analysis of human vocal expression, based on philosophical and scientific enquiry. His study was divided into fifty-one 'sections' devoted to: the English sounds (description and production), the melody of speech (intonation, tones, rhythm, accent, stress, emphasis, pause), and elocutionary practice (with particular attention to time, force, pitch, cadence and monotony). The book's apparent and immediate usefulness to teachers made Dr. Rush a recognized authority in the discipline of elocution: influential teachers of preachers, doctors, actors, together with all the specialists in speech therapy, phonetics and voice training were attracted to his masterpiece. Rush, a great disciple of Bacon, experimented his theories with his own voice (he was also a musician) and narrated the process of his evolving ideas: his method demonstrated that it was time physiology took the study of the human voice out of the hands of rhetoricians and grammarians. The development of a natural, systematic, analytic science had to be supported by new and precise observations. His way of describing and teaching elocution not only signalled the end of the British elocutionary practice, but also stimulated many American teachers to produce their own textbooks.

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[41] K.W. Wallace ed., *Op. Cit.,* p. 105.

[42] J. Rush, *The Philosophy of the Human Voice* [...], cit.; J. Barber, *A Grammar of Elocution, Containing the Principles of the Arts of Reading and Speaking,* A.H. Maltby, New Heaven 1830; A. Comstock, *Practical Elocution or a System of Vocal Gymnastics,* Kay & Brothers, Philadelphia 1837; Id., *A System of Elocution with Special Reference to Gesture,* Butler & Williams, Philadelphia 1844.

In the theatre circuit, from Boston to New Orleans and to California, more than fifty companies were scattered throughout the United States in 1850: most of the actors gave programmes of readings in schools and universities[43]. Among the clergy too, we find some elocutionists who made history: Rev. James Chapman, author of *The Original Rhythmical Grammar of the English Language*[44]; Rev. William Bryant, episcopal schoolmaster in Philadelphia[45]; Rev. Ebenezer Porter, professor of Sacred Rhetoric in Andover Seminary[46].

As in England the century before, the production of the elocutionists' treatises, manuals or textbooks was enormous and had wide circulation[47] till the end of the nineteenth century. They were later on criticized as 'unscientific', 'over-simplifying', and only of historical interest.

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[43] James Murdoch, for example, extended the so-called *Rush system* by his lectures and public reading entertainments (M. Bernstein ed., *The Collected Works of James Rush*, 4 voll., M & S Press, Weston 1974, p. 12, n. 15).

[44] J. Chapman, *The Original Rhythmical Grammar of the English Language. Or, The Art of Reading and Speaking, on the Principles of the Music of Speech (1821)*, Georg Olms Verlag, Hildesheim-New York, 1976.

[45] M. Bernstein ed., *Op. Cit.*, p. 5.

[46] K.W. Wallace ed., *Op. Cit.*, p. 181.

[47] From an examination of college catalogues (1821-1859), Guthrie (cfr. W. Guthrie, *Rhetorical Theory in Colonial America*, in K.W. Wallace ed., *Op. Cit.*, pp. 48-79) found that the most used textbooks were those written by three well-known teachers of elocution: Rev. E. Porter (cit. in K.W. Wallace ed., *Op. Cit*, p. 181), followed by J. Barber (*Op. cit.*) and W. Russell (the first editor of the *American Journal of Education*, published from 1826-1829).

Personally, we agree with Crystal when he affirms that, as far as the elocutionary studies are concerned,

> What could have been a valuable emphasis on the prosodic features of utterance, then, was made valueless by a thoroughly unscientific prescriptivism and impressionism, and a lack of definition of crucial descriptive terms[48].

Nevertheless, we hope that our historical survey will show that U.S. intonational studies had a quicker development than the British ones and revealed a completely different nature. The emphasis in all the American writings was less on the use of prosodic features in a literary context and more on their use to promote 'effective' speech: on the contrary, the need for a 'correct' oral style is recognized sporadically in early literature on language in England[49]. In the American writings of the eighteenth and nineteenth centuries, a first attempt was made to develop a *science of speech:* the manuals published during that period are an endless mine of information about reading and speaking skills, speech sounds (isolated or in context), prosodic features, speech defects and speech correction. Their aim was the sincere desire to improve the speaking and reading of the American people; their common interest was to study vocal mechanism and prosodic features – joined to body movements –, as one of the cues to *effectiveness* in oral communication in general, or to public speaking in particular. Unfortunately, their followers sometimes brought discredit upon their scholars, by misinterpretation and lack of serious study and appreciation. Nevertheless, thanks to all the American scholars, teachers, and rhetoricians of the 18th and 19th centuries, the study of the voice became an important part of the educational plan of any American student: the subject matter and purposes of public speaking courses nowadays present a heritage in U.S. universities as classical as that of literature, while yet suiting the 'pragmatic temper' of the modern United States[50].

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[48] D. Crystal, *Prosodic Systems and Intonation...*, cit., p. 34.

[49] An exception could be given by J. Wesley *(Op. Cit.,* par. 1.7*)*, when he criticises 'unnatural tones' such as 'womanish, squeaking' tones, or any 'odd, whimsical, whining tone', and recommends «Endevour to speak in Publick just as you do in Common Conversation».

### 4.2.3. *James Rush (1786-1869)*

Dr. James Rush was a physician. Although he was born and died in Philadelphia, he was brought up in Maryland and spent all his life in the U.S.A., apart from two long trips around Europe in 1809-1811 and 1845. He was a convinced disciple of Bacon, he knew music (he played the violin), and had developed a great passion for the study of the voice since he graduated in medicine. He studied the physiology of the voice for some years, especially during his visits to Edinburgh and London, but at the beginning of his career he had little knowledge of the subject except for medical facts and elementary British books on the subject (among these, Walker's *Elements of Elocution,* Sheridan's *Lectures on Elocution,* and Steele's *Prosodia Rationalis).* It seems that only his tenacity and his extraordinary shrewdness gave him the strength which was necessary to accomplish his four books, unfortunately largely neglected for decades by both the American and the European public: *The Philosophy of the Human Voice* (first edition dated 1827, now in its seventh edition), *Hamlet: A Dramatic Prelude in Five Acts* (1834), *Brief Outline of an Analysis of the Human Intellect* (1865), and *Rhymes of Contrast on Wisdom and Folly* (1869)[51].

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[50] For a discussion on this topic, see: D.K. Smith, *Origin and Development of Departments of Speech,* in K.R. Wallace ed., *Op. Cit.,* pp. 447-470.

[51] M. Bernstein ed., *The Collected Works of James Rush,* 4 voll., M & S Press, Weston (Massachusetts) 1974. Bernstein edited the following works made by Rush: J. Rush, *The Philosophy of the Human Voice, Embracing its Physiological History, Together with a System of Principles by Which Criticism in the Art of Elocution May Be Rendered Intelligible, and Instruction, Definite and Comprehensive, to Which is Added a Brief Analysis of Song and Recitative,* Grigg and Elliott, Philadelphia 1893 (7th edit.); Id., *Hamlet: A Dramatic Prelude in Five Acts,* Key and Biddle, Philadelphia 1834; Id., *Brief Outline of an Analysis of the Human Intellect; Intended to Rectify the Scholastic and Vulgar Perversions of the Natural Purpose, and Method of Thinking,* 2 voll., J.B. Lippincott & Co., Philadelphia 1865; Id., *Rhymes of Contrast on Wisdom and Folly. A Comparison between Observant and and Reflective Age, Derisively Called Fogie, and a Senseless and Unthinking American Go-Ahead. Intended to exemplify an Important Agent in the Working Plan of Human Intellect. A Narrated Dialogue,* J.B. Lippincott & Co., Philadelphia 1869.

The first book contains an important step towards the modern definition of the concept of American *Intonation*. Often referred to as *The Voice*, the volume was initially ignored or disregarded by critics and scholars and hardly noticed outside Philadelphia; quite unusually, however, it was immediately welcomed by clerks, shopkeepers, and students of different disciplines. The author had been aware of the fact that the American public was not ready for such a textbook, for in his *Preface to the Second Edition* (1838) he wrote:

> I remember, one of the Patron's objections [...] to publishing the 'Philosophy of the Human Voice' was, 'its not being *suited to this country*'. It is true, the higher views of science and taste [...] in a country, where, before all others, nothing is adopted, or is successful, except with the influential agency of numbers, are considered as rebellion against the Kingly-rule of Popularity [...]. Yet upon this very conviction I offered the Work to the public; hoping, by the diffusion of its principles, to bring it into that old and only path of truth[...]; and, in due season, *to suit the country to it*[52].

And to those who complained to him about the difficulty of his book, Rush answered with an anecdote:

> Too difficult! Why, all new things are difficult! Just one century has elapsed since that common material of furniture, Mahogany, was first known in England. It is recorded that Dr. Gibbons, an eminent physician of that period, had a brother, a West-Indian captain, who took over to London some planks of this wood, as balast. The Doctor was then building a house; and his brother thought they might be of service to him. But the carpenters finding the wood *too hard for their tools,* it was laid aside. Soon after, a candle-box being wanted in his family, Dr. Gibbons requested his cabinet-maker to use some of this plank which lay in the garden. The cabinet-maker also complained, that *it was too hard.* The Doctor told him; he must *get stronger tools.* When however by successful means, the box was made, the Doctor ordered a bureau of the same material; the color and polish of which were so remarkable, that he invited his friends to view it. [...] Under this influence, the fame of mahogany was at once established; its manufacture was then found to be in nowise difficult[53].

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[52] J. Rush, *Preface to the Second Edition,* in M. Bernstein ed., *The Collected Works...,* cit., p. xli-xlii. The 'Patron' Rush refers to is the so-called 'Publishing-Patron of American writers'.

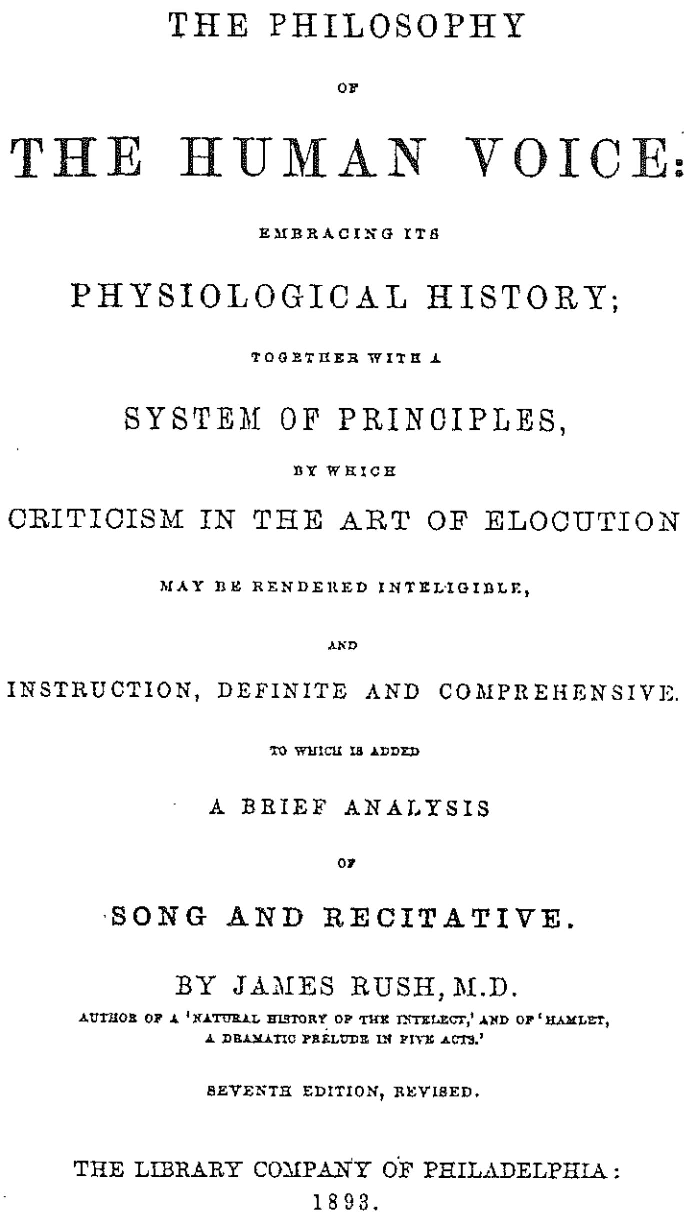
[53] *Ibid.*, p. xliii.

The parallel between mahogany and *The Voice* is clear. As the precious mahogany wood was disdained and considered too hard a wood to be used, so Rush's valuable work was underestimated because too 'new', too unusual in its methods and contents, and too difficult to be studied, as a consequence.

Based on a basic knowledge of music, the book suggested an original system of description of prosodic features and an even more unique way of teaching them. Rush's system slowly attracted some of the most influential teachers of preachers, doctors and actors of the U.S. It stimulated attention to speech therapy, phonetics, and voice training for the theatre. In the long run, but unfortunately only after Rush's death, the book earned admirers and followers, so as to create a persistent influence on American oratory, rhetoric, and speech education throughout the twentieth century. In fact, *The Voice* revealed the authentic role of *sounds* as functions of human physiology, raised questions about the sounds of birds and animals, compared vocal sounds with musical sounds and treated them as a human activity in the control of a trained intelligence and good taste. The book carried the authority of:

i) a physician, who knew how the human body works,
ii) a musician, who was an expert on the conventions of music,
iii) a literate, who was used to the pleasures of literature and theatre.

Rush's biographers describe him as a perfectionist, experimenting his theories on the human voice with his own voice, writing for hours the process of his own evolving ideas, always trying to establish a reliable vocal system. His strong attitude towards the *method*, as well as the *contents* of his research is a constant in Rush's writings and makes them a pioneering work: his natural way of combining his private, medical, scientific, and Baconian curiosity signals the end of the dominance of the British Elocutionary theory and practice in the U.S.A. and the beginning of a 'new', specialized American production of textbooks.



THE PHILOSOPHY

OF

THE HUMAN VOICE:

EMBRACING ITS

PHYSIOLOGICAL HISTORY;

TOGETHER WITH A

SYSTEM OF PRINCIPLES,

BY WHICH

CRITICISM IN THE ART OF ELOCUTION

MAY BE RENDERED INTELIGIBLE,

AND

INSTRUCTION, DEFINITE AND COMPREHENSIVE.

TO WHICH IS ADDED

A BRIEF ANALYSIS

OF

SONG AND RECITATIVE.

BY JAMES RUSH, M.D.
AUTHOR OF A 'NATURAL HISTORY OF THE INTELECT,' AND OF 'HAMLET,
A DRAMATIC PRÉLUDE IN FIVE ACTS.'

SEVENTH EDITION, REVISED.

THE LIBRARY COMPANY OF PHILADELPHIA:
1893.

Fig. 4.5 – Front Cover of *The Philosophy of the Human Voice* (1827)

In its opening paragraphs *The Voice* announced that it was time that physiology took the study of the human voice out of the hands of rhetoricians and grammarians.

> By every scheme of the cyclopedia, the subject of the voice is alotted to the physiologist; yet upon its most important function, speech and its expression, he has strangely neglected his part by borrowing much of supposed knowledge from the wild notions of rhetoricians, and the intermedling authority of grammarians. *It is time at last, for physiology seriously to take up its task*[54].

New and precise observations were needed. Sound was not invention, figures of speech, or style. Sound was air produced through a voice box.

> Physiologists have described and classed the organic positions that produce the alphabetic elements. *This has been done by the rule, and with the success of philosophy.* [...] In describing the function of pitch, or the rise and fall of the voice, which we here call Intonation, they have not designated by some known or invented scale, the forms and degrees of such movements; [...] They have rather given their attention to the following inquiries: *Whether the organs of the voice have the structure of a wind, or of a stringed instrument; how the falsete is made; and whether acuteness and gravity are formed by the variations in the aperture of the glottis, or in the tension of its chords*[55].

Rush's volume supplied its reader with 620 pages of a careful and detailed description of human sounds and melody. He adapted and invented – where it was necessary – the terminology he needed; he described all the delicate discriminations he had recorded of his own voice experiments (especially about diphthongs, the glide, and the circumflex accent); he referred about what he had occasionally experienced in the audience of a classroom, a meeting, a political convention, a recital, a musical entertainment, or a play. This vast quantity of material became the object of the fifty-one chapters which make up the volume. Here is the entire list of the topics discussed, taken from the *Index of Contents*.

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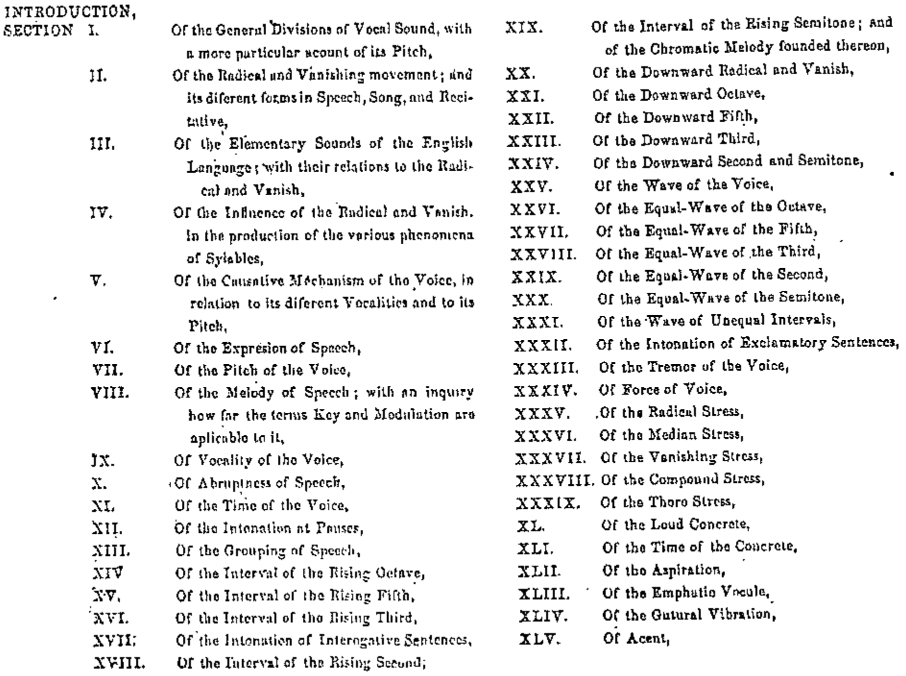
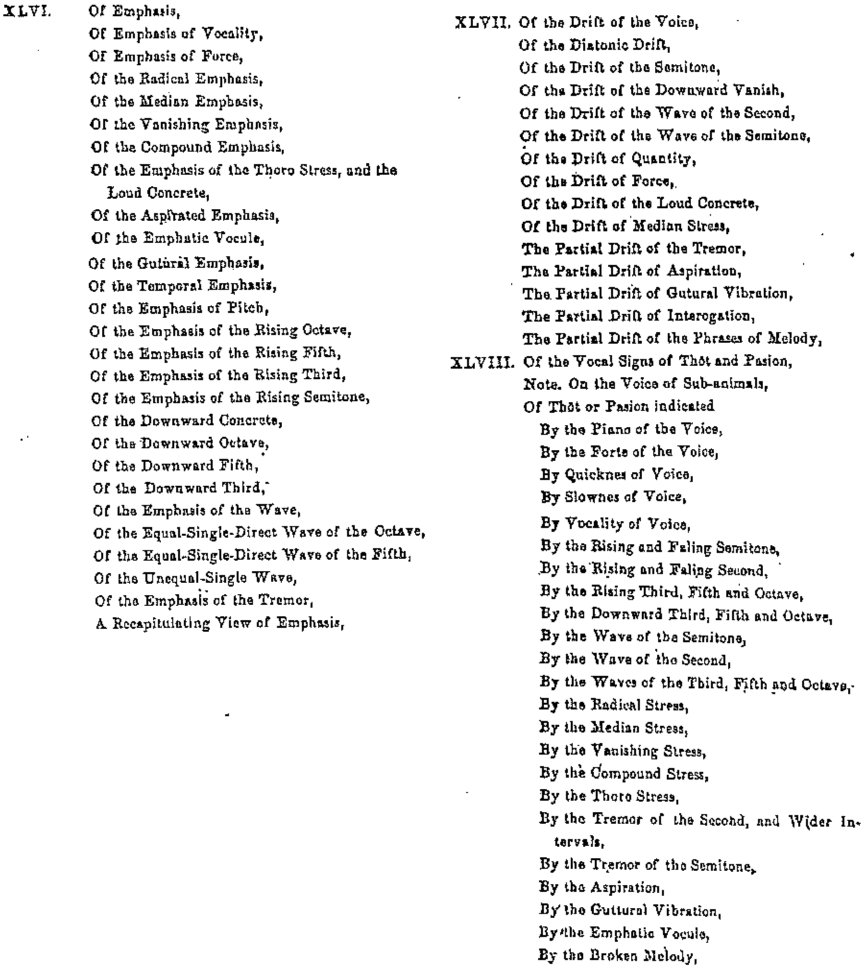
[54] M. Bernstein ed., *The Collected Works...*, cit., p. 45. My italics.

[55] *Ibid.*, p. 47. My italics.



INTRODUCTION,
SECTION I. Of the General Divisions of Vocal Sound, with a more particular acount of its Pitch,
II. Of the Radical and Vanishing movement; and its diferent forms in Speech, Song, and Recitative,
III. Of the Elementary Sounds of the English Language; with their relations to the Radical and Vanish,
IV. Of the Influence of the Radical and Vanish. In the production of the various phenomena of Sylables,
V. Of the Causative Mechanism of the Voice, in relation to its diferent Vocalities and to its Pitch,
VI. Of the Expresion of Speech,
VII. Of the Pitch of the Voice,
VIII. Of the Melody of Speech; with an inquiry how far the terms Key and Modulation are aplicable to it,
IX. Of Vocality of the Voice,
X. Of Abruptness of Speech,
XI. Of the Time of the Voice,
XII. Of the Intonation at Pauses,
XIII. Of the Grouping of Speech,
XIV Of the Interval of the Rising Octave,
XV. Of the Interval of the Rising Fifth,
XVI. Of the Interval of the Rising Third,
XVII. Of the Intonation of Interogative Sentences,
XVIII. Of the Interval of the Rising Second;
XIX. Of the Interval of the Rising Semitone; and of the Chromatic Melody founded thereon,
XX. Of the Downward Radical and Vanish,
XXI. Of the Downward Octave,
XXII. Of the Downward Fifth,
XXIII. Of the Downward Third,
XXIV. Of the Downward Second and Semitone,
XXV. Of the Wave of the Voice,
XXVI. Of the Equal-Wave of the Octave,
XXVII. Of the Equal-Wave of the Fifth,
XXVIII. Of the Equal-Wave of the Third,
XXIX. Of the Equal-Wave of the Second,
XXX. Of the Equal-Wave of the Semitone,
XXXI. Of the Wave of Unequal Intervals,
XXXII. Of the Intonation of Exclamatory Sentences,
XXXIII. Of the Tremor of the Voice,
XXXIV. Of Force of Voice,
XXXV. Of the Radical Stress,
XXXVI. Of the Median Stress,
XXXVII. Of the Vanishing Stress,
XXXVIII. Of the Compound Stress,
XXXIX. Of the Thoro Stress,
XL. Of the Loud Concrete,
XLI. Of the Time of the Concrete,
XLII. Of the Aspiration,
XLIII. Of the Emphatic Vocule,
XLIV. Of the Gutural Vibration,
XLV. Of Acent,

Fig. 4.5a – Contents of *The Philosophy of the Human Voice* (1827)

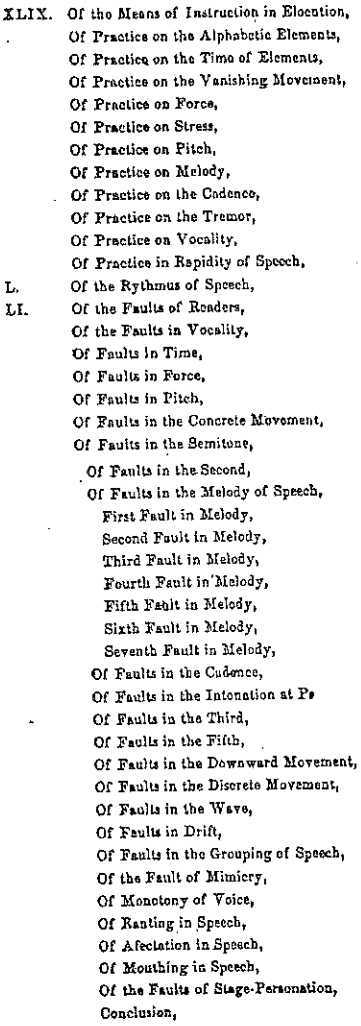


XLVI. Of Emphasis,
Of Emphasis of Vocality,
Of Emphasis of Force,
Of the Radical Emphasis,
Of the Median Emphasis,
Of the Vanishing Emphasis,
Of the Compound Emphasis,
Of the Emphasis of the Thoro Stress, and the Loud Concrete,
Of the Aspirated Emphasis,
Of the Emphatic Vocule,
Of the Gutural Emphasis,
Of the Temporal Emphasis,
Of the Emphasis of Pitch,
Of the Emphasis of the Rising Octave,
Of the Emphasis of the Rising Fifth,
Of the Emphasis of the Rising Third,
Of the Emphasis of the Rising Semitone,
Of the Downward Concrete,
Of the Downward Octave,
Of the Downward Fifth,
Of the Downward Third,
Of the Emphasis of the Wave,
Of the Equal-Single-Direct Wave of the Octave,
Of the Equal-Single-Direct Wave of the Fifth,
Of the Unequal-Single Wave,
Of the Emphasis of the Tremor,
A Recapitulating View of Emphasis,

XLVII. Of the Drift of the Voice,
Of the Diatonic Drift,
Of the Drift of the Semitone,
Of the Drift of the Downward Vanish,
Of the Drift of the Wave of the Second,
Of the Drift of the Wave of the Semitone,
Of the Drift of Quantity,
Of the Drift of Force,
Of the Drift of the Loud Concrete,
Of the Drift of Median Stress,
The Partial Drift of the Tremor,
The Partial Drift of Aspiration,
The Partial Drift of Gutural Vibration,
The Partial Drift of Interogation,
The Partial Drift of the Phrases of Melody,

XLVIII. Of the Vocal Signs of Thôt and Pasion,
Note. On the Voice of Sub-animals,
Of Thôt or Pasion indicated
  By the Piano of the Voice,
  By the Forte of the Voice,
  By Quicknes of Voice,
  By Slownes of Voice,
  By Vocality of Voice,
  By the Rising and Faling Semitone,
  By the Rising and Faling Second,
  By the Rising Third, Fifth and Octave,
  By the Downward Third, Fifth and Octave,
  By the Wave of the Semitone,
  By the Wave of the Second,
  By the Waves of the Third, Fifth and Octave,
  By the Radical Stress,
  By the Median Stress,
  By the Vanishing Stress,
  By the Compound Stress,
  By the Thoro Stress,
  By the Tremor of the Second, and Wider Intervals,
  By the Tremor of the Semitone,
  By the Aspiration,
  By the Guttural Vibration,
  By the Emphatic Vocule,
  By the Broken Melody,

Fig. 4.5b – Contents of *The Philosophy of the Human Voice* (1827)



XLIX. Of the Means of Instruction in Elocution,
Of Practice on the Alphabetic Elements,
Of Practice on the Time of Elements,
Of Practice on the Vanishing Movement,
Of Practice on Force,
Of Practice on Stress,
Of Practice on Pitch,
Of Practice on Melody,
Of Practice on the Cadence,
Of Practice on the Tremor,
Of Practice on Vocality,
Of Practice in Rapidity of Speech,
L. Of the Rythmus of Speech,
LI. Of the Faults of Readers,
Of the Faults in Vocality,
Of Faults in Time,
Of Faults in Force,
Of Faults in Pitch,
Of Faults in the Concrete Movement,
Of Faults in the Semitone,
Of Faults in the Second,
Of Faults in the Melody of Speech,
First Fault in Melody,
Second Fault in Melody,
Third Fault in Melody,
Fourth Fault in Melody,
Fifth Fault in Melody,
Sixth Fault in Melody,
Seventh Fault in Melody,
Of Faults in the Cadence,
Of Faults in the Intonation at P
Of Faults in the Third,
Of Faults in the Fifth,
Of Faults in the Downward Movement,
Of Faults in the Discrete Movement,
Of Faults in the Wave,
Of Faults in Drift,
Of Faults in the Grouping of Speech,
Of the Fault of Mimicry,
Of Monotony of Voice,
Of Ranting in Speech,
Of Afectation in Speech,
Of Mouthing in Speech,
Of the Faults of Stage-Personation,
Conclusion,

Fig. 4.5c – Contents of *The Philosophy of the Human Voice* (1827)

As far as intonation is concerned, the most interesting Sections are:

1. *Section I. Of the General Divisions of Vocal Sounds, with a more particular account of its Pitch;*
2. *Section VIII. Of the Melody of Speech; with an inquiry how far the terms Key and Modulation are applicable to it;*
3. *Section XLIX. Of the Means of Instruction in Elocution...*

The first Section describes the basic concepts used by Rush to define the 'constituents of the human voice', the so-called *modes of Speech*. There are five:

1. *Vocality.* Referred to as 'Kind of voice', it is related to the quality of sounds or voices. In the very first edition of his work, Rush called it 'Quality', but then he decided to replace it with 'Vocality', the last one «having a less general application» and being «more appropriate to that audible voice which is distinguished from whisper»[56]. He sometimes refers to it with the French word *timbre.*
2. *Force.* It indicates the strength given by the speaker to his/her oral performance. It may be applied «to phrases, or to one or more sentences, for the purposes of energetic expression; or to single words, and to syllables; or to certain parts of the concrete movement; to distinguish them from other words and syllables»[57]. Force often depends on the speaker's state of mind: «Secrecy muffles itself against discovery by a whisper; and doubt, while leaning towards a positive declaration, cunningly subdues his voice», whereas «Certainty, on the other hand, in the confident desire to be heard, is positive, distinct, and forcible», and anger «declares itself with energy, because its charges and denials are made with a wide appeal, and its own sincerity of conviction»[58]. The concept of Force is linked to that of Stress.
3. *Time.* It describes the *Quantity* of sound, or its *Duration*. Joshua Steele is Rush's main reference for this part: Rush gave examples of an application of the musical symbols to the variable time of discourse,

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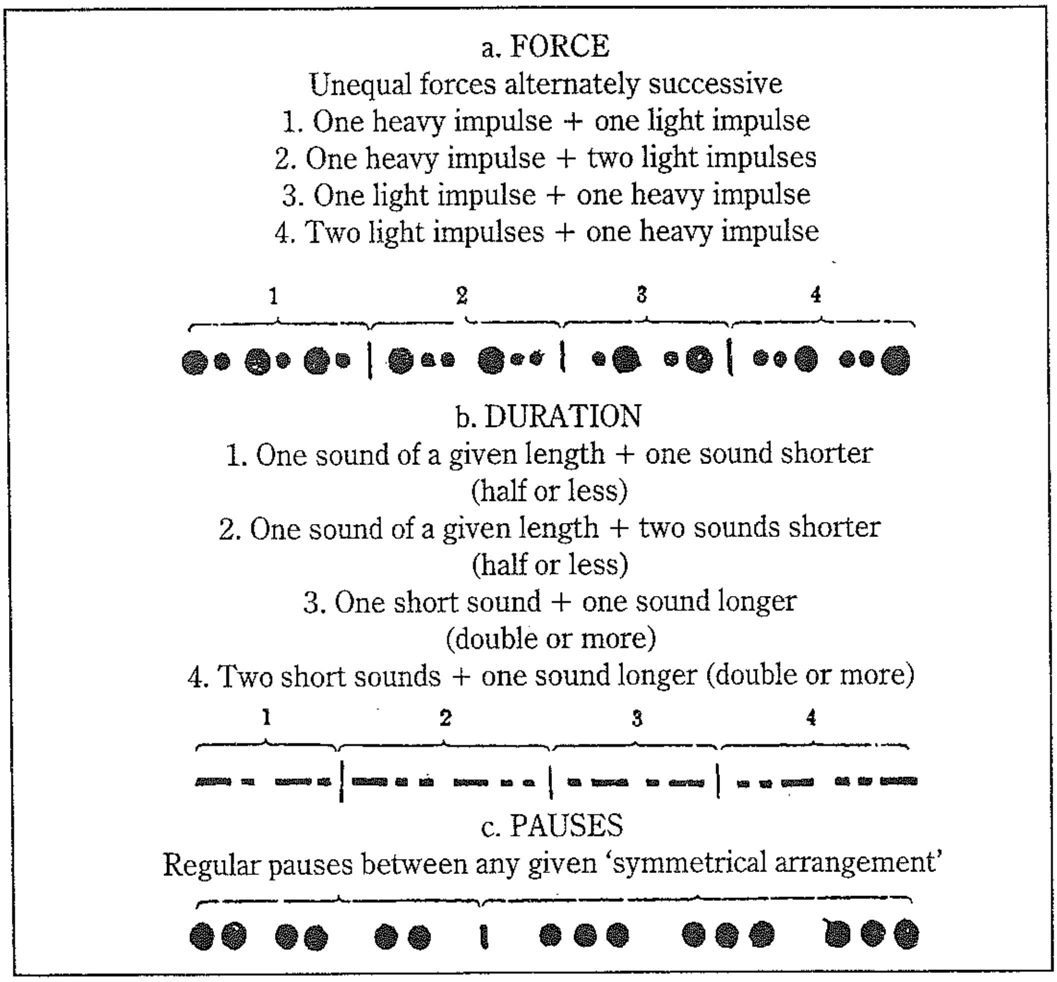
[56] *Ibid.*, p. 70, n. *.
[57] *Ibid.*, p. 364.
[58] *Ibidem.*

as Steele had done in his *Prosodia Rationalis.* Particular importance is given to the role of time in English syllables, in literature as well as in conversation; as a matter of fact, they are a product of both force and time: «a prolonged quantity is the essential of any agreeable tune – Rush said –. If then the perception of equal momentary accents [i.e. *force*] [...] is agreeable, the perception of a similar order of differing tunable *quantities* must be more so»[59]. In fig. 4.6 Rush's schemes are given about the relationship between force and time and his description of the proportion existing between syllables in English.



a. FORCE
Unequal forces alternately successive
1. One heavy impulse + one light impulse
2. One heavy impulse + two light impulses
3. One light impulse + one heavy impulse
4. Two light impulses + one heavy impulse

b. DURATION
1. One sound of a given length + one sound shorter (half or less)
2. One sound of a given length + two sounds shorter (half or less)
3. One short sound + one sound longer (double or more)
4. Two short sounds + one sound longer (double or more)

c. PAUSES
Regular pauses between any given 'symmetrical arrangement'

Fig. 4.6 – Proportions in the Successions of Sounds

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[59] *Ibid.*, p. 209.

4. *Abruptness*. It is similar to Force, but not exactly the same. It is defined as «the sudden and full discharge of sound, as contradistinguished from its more gradual emission. Abruptness is well represented by the explosive notes which may be executed on the bassoon, and by a quick touch on the organ»[60]. In other words, it is a sort of reinforcement of Force, not only at a higher degree but also in a different way. It can produce emphasis, for example. It is considered by Rush a 'momentary function', an 'explosion of the voice', whereas force is an essential component of the human voice.
5. *Pitch*. The forms and varieties of intonation belong to this mode. It is described in terms of *rise and fall, high and low, acute and grave* with the help of a method and a nomenclature taken from music. Rush's theory is completely indebted to music for this part: the Author himself admits that «he who is ignorant of the relations of musical sounds, and of the regular scale by which they have been arranged, must on this, and on so many other subjects of instruction which need perceptible illustration, have recourse to a Teacher»[61]. As a matter of fact, not only should the reader have some basic knowledge of music, but he/she is thought to be a real musician and an expert in acoustics. In fact, terms such as *Noise, Vibration, 'Tunable And Untunable' Sounds, Concrete and Discrete Intervals, Concrete Scale, Chromatic Scale, Diatonic Scale, Tremulous Scale and Degrees of a Scale, Interval, Tone and Semitone, Solfaing, Key, Key-Note and Modulation,* are commonly used throughout the volume.

We shall not go here into details about each of the five points, because this would require too many further references to music and it would bring us too far from the main point of our research. Instead, we shall consider Rush's definition of *tone* and *intonation:* they derive directly from his familiarity with the corresponding musical concepts of *musical tone* and *musical intonation,* where the attribute 'musical' is from Rush's point of view synonym of 'scientific' or 'precise, exact, careful'. In fact, by *tone* he means

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[60] *Ibid.*, p. 70.
[61] *Ibidem.*

> *only* a certain *interval of pitch;* though common language applies it alike to 'pitch, vocality, force and time'; as in the phrases 'high and low tones of the voice', 'musical, rustic and silver tones', an 'emphatic or loud tone', and 'a deliberate, quick and drawling tone'. *Even music, with all its scientific precision, is not free from slight confusion on this point* [my italics][62].

By *intonation* he means

> the act of performing the movements of pitch on any interval of the several scales, whether in speech, in song, or in instrumental use[63].

Apart from his strong musical interest, Rush concentrated on the study of the final pitch movement, especially in the case of exclamations and questions. An example of his synthesis on the subject is given in 4.7. In this *tabular view,* questions are considered in their grammatical, semantic, and stylistic form; a fourth group analyses the rhetorical force of the interrogative form. His analysis reveals a strong sensitivity to English language, both from a linguistic and from a prosodic point of view. His work seems to anticipate the wider – and more technical – descriptions of American intonation by Kenneth Pike.

### 4.2.4. *George L. Raymond*

Princeton University was an important centre for the development of oratory during the nineteenth century. It is here that George L. Raymond, professor of Oratory and Aesthetic, follower of James Rush, published in 1879 *A Practical and Philosophical Treatise on Vocal Culture, Emphasis and Gesture*, better known as *The Orator's Manual*[64]. As the Author underlines on the front cover, the book is «designed as a text-book for Schools and Colleges, and for the Public Speakers and Readers who are obliged to study *without an instructor*» (my italics).

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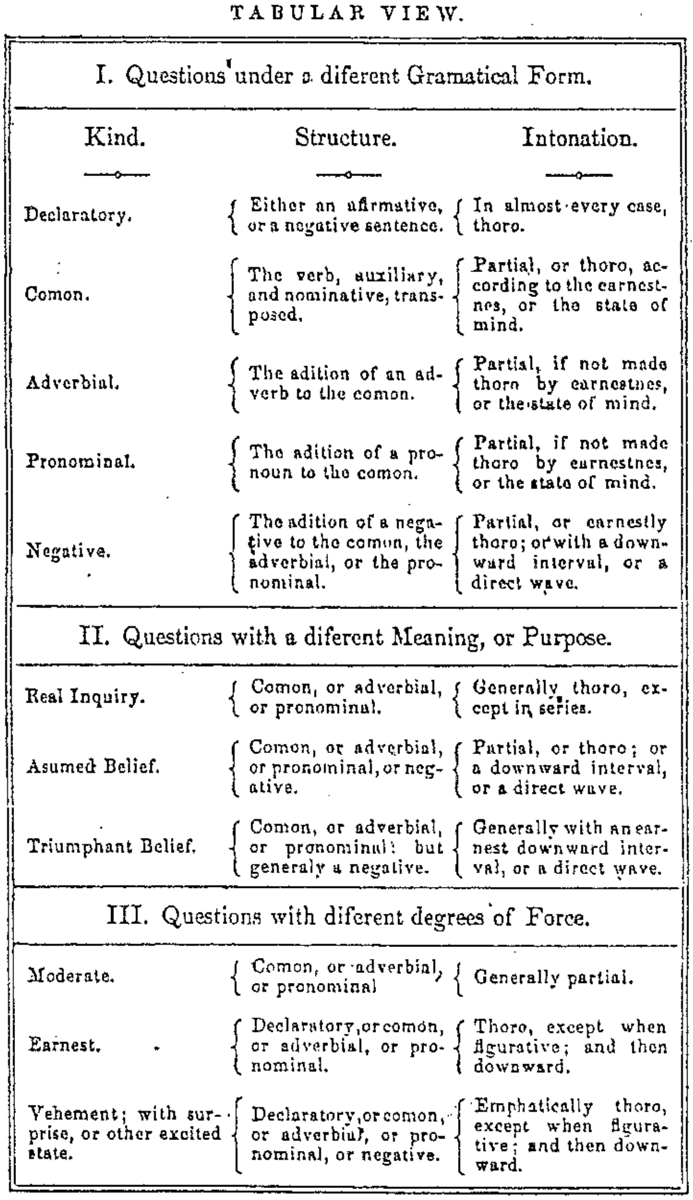
[62] *Ibid.*, p. 76, n. +.

[63] *Ibid.*, p. 85.

[64] G.L. Raymond, *The Orator's Manual (1879)*. G.P. Putnam's Sons, The Knickkerbocker Press, London-New York 1910.

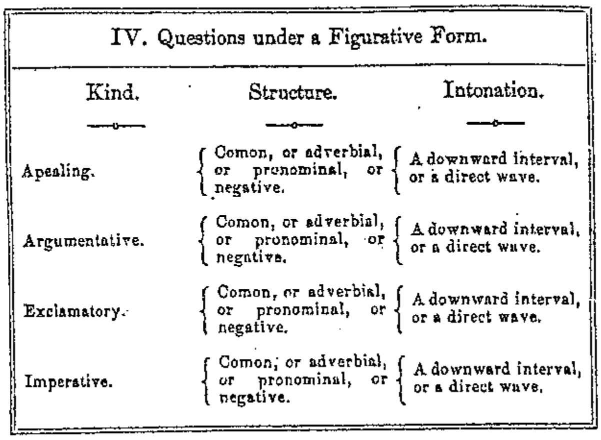


TABULAR VIEW.

| I. Questions under a diferent Gramatical Form. | | |
|---|---|---|
| **Kind.** | **Structure.** | **Intonation.** |
| Declaratory. | Either an afirmative, or a negative sentence. | In almost every case, thoro. |
| Comon. | The verb, auxiliary, and nominative, transposed. | Partial, or thoro, according to the earnestnes, or the state of mind. |
| Adverbial. | The adition of an adverb to the comon. | Partial, if not made thoro by earnestnes, or the state of mind. |
| Pronominal. | The adition of a pronoun to the comon. | Partial, if not made thoro by earnestnes, or the state of mind. |
| Negative. | The adition of a negative to the comon, the adverbial, or the pronominal. | Partial, or earnestly thoro; or with a downward interval, or a direct wave. |
| **II. Questions with a diferent Meaning, or Purpose.** | | |
| Real Inquiry. | Comon, or adverbial, or pronominal. | Generally thoro, except in series. |
| Asumed Belief. | Comon, or adverbial, or pronominal, or negative. | Partial, or thoro; or a downward interval, or a direct wave. |
| Triumphant Belief. | Comon, or adverbial, or pronominal: but generaly a negative. | Generally with an earnest downward interval, or a direct wave. |
| **III. Questions with diferent degrees of Force.** | | |
| Moderate. | Comon, or adverbial, or pronominal | Generally partial. |
| Earnest. | Declaratory, or comon, or adverbial, or pronominal. | Thoro, except when figurative; and then downward. |
| Vehement; with surprise, or other excited state. | Declaratory, or comon, or adverbial, or pronominal, or negative. | Emphatically thoro, except when figurative; and then downward. |

«*I here recapitulate the several grammatical Forms of questions, the states of mind, meaning, or purpose that direct them, and their degrees of Force; with their Kinds, Structures, and Intonations, under a Tabular View*» (p. 348).

Fig. 4.7a – Rush's 'Tabular View'
Source: J. Rush, *The Philosophy of the Human Voice* (1827), pp. 347-348.



IV. Questions under a Figurative Form.

| Kind. | Structure. | Intonation. |
|---|---|---|
| Apealing. | Comon, or adverbial, or pronominal, or negative. | A downward interval, or a direct wave. |
| Argumentative. | Comon, or adverbial, or pronominal, or negative. | A downward interval, or a direct wave. |
| Exclamatory. | Comon, or adverbial, or pronominal, or negative. | A downward interval, or a direct wave. |
| Imperative. | Comon, or adverbial, or pronominal, or negative. | A downward interval, or a direct wave. |

Fig. 4.7b – Rush's 'Tabular View'
Source: J. Rush, *The Philosophy of the Human Voice* (1827), pp. 347-348.

The aim of the book and the method followed are clearly stated in the Preface:

> This book has been prepared to supply a want felt by the author while giving instruction in his own classes, and felt, as he believes, by many overworked teachers who often, without making a specialty of elocution, desire to give efficient instruction in it, yet have no manual at hand enabling them to do this [...]. *It is intended to present, in concise and comprehensive form, some new material,* the results of the author's own experience in teaching; *but over and beyond this to be a compend, amply illustrated,* of the best that has been published or taught on the subject of which it treats with each department of the art so described that *its methods shall be distinctly apprehended, so explained that the principles underlying their use shall be easily understood, and so few that they can be readily applied*[65].

Raymond's work is a perfect balance of theory and practice. Its pedagogical nature is fully respected by the Author, who describes in a hundred fifty pages what he means by 'Vocal Culture (Vowel and Consonant Sounds), Emphasis (and Time, Pitch, Force, Volume), Gesture' and leaves the remaining two hundred and fifty pages to 'Selections for Declamation'.

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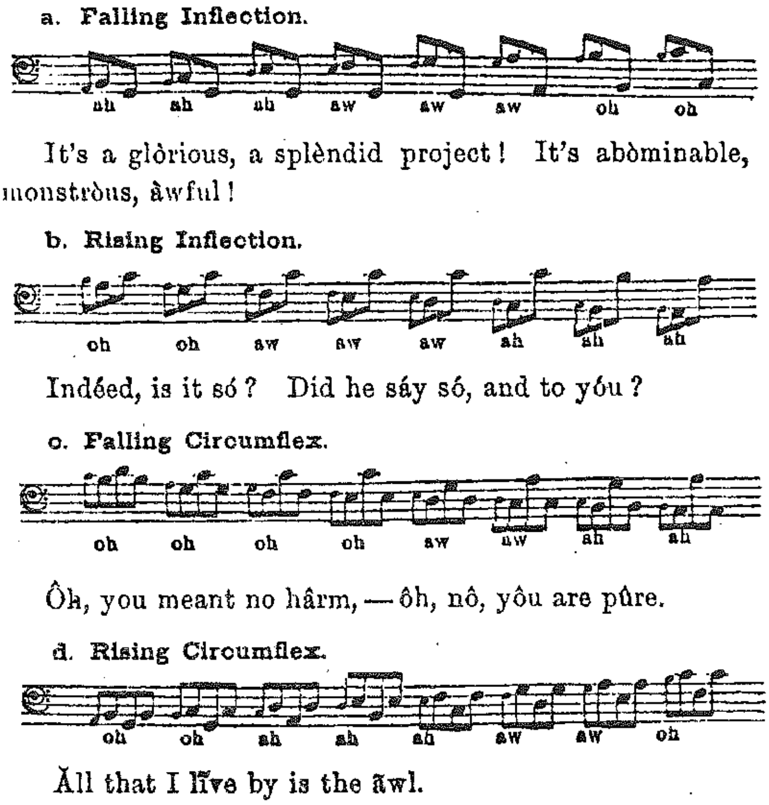
[65] *Ibid.*, p. 3.



a. **Falling Inflection.**

It's a glòrious, a splèndid project! It's abòminable, monstròus, àwful!

b. **Rising Inflection.**

Indéed, is it só? Did he sáy só, and to yóu?

c. **Falling Circumflex.**

Ôh, you meant no hârm, — ôh, nô, yôu are pûre.

d. **Rising Circumflex.**

Ǎll that I lǐve by is the ǎwl.

Fig. 4.8 – Raymond's Inflections
Source: G. Raymond, *The Orator's Manual* (1879), p. 28.

As far as *intonation* is concerned, the Author considers it as an important device to convey *emphasis*. He calls it *inflection* or *bend* and he describes it as the fundamental representation of any *mental motive*. All the *inflections* (mainly rising, falling and circumflex, see fig. 4.8) depend on the *motive of the mind*, not on the grammatical form nor on punctuation: this sort of 'attitudinal function' of intonation will be one of the most favourite subjects of American intonational studies throughout the nineteenth century[66].

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[66] For a discussion on the 'attitudinal function' of intonation in the twentieth century see: K. Pike, *The Intonation of American English*, cit., pp. 23-24. A study on the intonational 'attitudinal meanings' has recently been carried out in: A. Zanola Macola, *Atti linguistici indiretti e intonazione: spunti per una riflessione*, «L'Analisi Linguistica e Letteraria», 1, 1999, pp. 245-258.

> Elocutionary Inflections, like Pauses, depend *on the sense.* [...] In giving the changes in pitch peculiar to the inflections, the voice *rises* when moved *to open* and *falls to close* a sentence, if *the sense* opens and closes where the sentence does. [...] In giving elocutionary emphasis, the voice rises for the purpose of *opening up or broaching an idea*; [...] the voice falls for the purpose of *closing or completing an idea.*

These considerations seem to anticipate some important contemporary theories on the functions of intonation. The idea of a rough distinction between a rising intonation indicating 'non-finality' vs a falling intonation signalling 'finality' is at the basis of some of the most recent British studies[67]. The complete chart of the possible *contrasted inflections* of the English language is given in figg. 4.9 and 4.10. The occasional usage of a more complex kind of *inflection* (the so-called *circumflex or wave)* is determined by the coordination or subordination of one or more sentences to the main one.

*Inflection* has an important 'emotional function'. A varied melody is at the basis of the expression of different feelings. From happiness to sadness, from fear to surprise, all the human attitudes can be realized orally, according to the Author, by a balanced combination of the following prosodic features[68]:

1. *Time.* Determined by the rapidity with which words are uttered, it can be *fast, slow, moderate, moderately slow.*
2. *Quantity of time.* It determines the manner of pausing, because it is linked to the length of the syllables. Its *shortness or length* depend on the correct use of inflections, stress, force.
3. *Pitch.* Strictly linked to *inflections,* it may be *high, low, or middle,* according to the rising or falling of the voice. Actually, the *middle pitch* is produced when the voice neither rises nor falls: in this case an effect of suspence is produced.
4. *Key.* When it is *high,* it produces a *varied melody* expressing «light, gay, lively, uncontrolled moods»; when it is *low,* an *unvaried melody* is

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[67] We refer in particular to: P. Roach, *English Phonetics and Phonology. A Practical Course,* cit., chap. 14; A. Cruttenden, *Intonation,* Cambridge University Press, Cambridge 1997$^2$, chap. 4. For a discussion on this topic see: A. Zanola Macola, *L'intonazione dell'inglese. Studi storici e prospettive teoriche,* unpublished 'Tesi di dottorato', Università Cattolica del Sacro Cuore, Milan 1995-1996, chapt. 10.

[68] The analysis of the prosodic features and the short quotations are taken from: G.L. Raymond, *Op. Cit.,* pp. 35-105.