Comparison with Rogers’ 1991 textbook

At first glance *The sounds of language* appears to be a revision of Rogers’ 1991 textbook *Theoretical and practical phonetics*. Indeed, whole sections from the earlier book appear to have been transferred to the new book. There are, however, differences which warrant the publication of this book with a new title rather than as a new edition under the old title.

*Theoretical and practical phonetics* was written specifically for the Canadian market, it used Canadian English as its initial model for introducing phonetics, it also had a chapter on Canadian French. *The sounds of language* is designed for an international market, uses as its initial models Received Pronunciation (RP) and General American English (GA) (“standard” dialects from England and the US), and has no chapter on Canadian French. A reader looking for an introductory phonetics textbook dealing with Canadian English should, however, still consider *The sounds of language*. After covering RP and GA, there is a chapter which not only describes General-Canadian and Newfoundland English but also Cockney, Yorkshire, Scottish, Belfast, Dublin, Australian, New Zealand, South African, Carribean, Indian, New England, New York City, Southern US, and African-American Vernacular English. This makes the book more accessible to anyone more familiar with one of these varieties of English than with RP or GA, and is also useful for anyone interested in the differences between the pronunciation of various varieties of English.

The chapter on Hearing and Perception in *Theoretical and practical phonetics* has not been transferred to *The sounds of language*, readers interested in this topic will have to look elsewhere (coverage of the topic in the first book was not extensive). The chapter on Features, including the classification of segments in feature trees was also not transferred to the new book.

The quality of the printing of the spectrograms in *Theoretical and practical phonetics* is superior to that in *The sounds of language*, vastly improving their value to the reader. Phonetic transcriptions used in *The sounds of language* are in accordance with the 1993 revision and 1996 update of the International Phonetic Alphabet (IPA) (see International Phonetic Association, 1999).
Strengths

The great pedagogical strength of *The sounds of language* is its overall organisation. The first section of the book includes an introduction to gross anatomy related to speech production, followed by an introduction to the articulation of the basic sounds of English. This is followed by chapters covering the articulation of English consonants, vowels, and suprasegmentals (stress and intonation). This second section goes into more detail than the first, including information on allophonic variation, there is also an appendix giving quite a comprehensive inventory of English consonantal allophones. Following an introduction to acoustic phonetics, the speech sounds of English are then covered again from an acoustic viewpoint. Finally there are chapters which provide articulatory and acoustic descriptions of sounds from many languages. This final section is arranged using a scheme typical for articulatory classification, the chapters are: vowels and glides, place of articulation, manner of articulation, phonation type, airstream mechanisms, and syllables and suprasegmentals. The book, therefore, cycles through the same topics several times, each time providing more detail and using a more technical approach. Pedagogically, this seems to be an excellent way to structure the book: the novice reader is not immediately overwhelmed by technical detail, concepts and information are repeated, reenforcing learning, and the reader has an existing framework in which to place the more detailed information from later chapters. Topics and concepts covered start with the more familiar and intuitive, the sounds of English and articulatory phonetics, and end with the less familiar and more abstract, sounds from other languages and acoustic phonetics.

For an ESL teacher interested in learning a little about phonetics, the first part of the book dealing with the articulation of English sounds will probably be most relevant. The information on acoustic phonetics would be of greater use to someone with a more serious interest in phonetics, and would be helpful for anyone wanting to go on to read research on cross-language speech perception. The latter deals with problems that second language learners have in hearing the sounds of the second language, and is relevant to teaching listening as well as pronunciation.

Other strengths of *The sounds of language* include its liberal use of subtitles, making it easy to locate information when using the book for reference. When new vocabulary is introduced, mention is often made of both nominal, adjectival, and combining forms where relevant, something which I have found can be problematic for inexperienced students of phonetics. The pronunciation of new vocabulary is also provided, if not in the text then in the glossary. An appendix provides hand-written examples of phonetic symbols; writing the symbols correctly is very important, and again I have found this to be problematic for inexperienced students. The same appendix provides names for each symbol, useful in any situation when the symbols have to be described orally. The introduction to acoustic phonetics is very clear, harmonics
and formants are introduced in different chapters making it less likely that readers will confuse the two. However, no explanation of why harmonics should exist is given. The explanations of how to read spectrograms of English sounds are generally very good. A large number of spectrograms are provided, giving examples for the majority of sounds covered, both English and non-English, and including different allophones of English sounds. The number of spectrograms provided is much greater than normally found in introductory phonetics textbooks.

Weaknesses

Some improvements could be made to The sounds of language.

No answers are provided for the exercises. Certain exercises, such as the transcription exercises, would be more pedagogically useful if the reader were able to check their answers (this would be especially useful for an individual reader as opposed to a student in a class). Some of the spectrogram reading exercises are too difficult for an introductory textbook, they are even challenging for experienced phoneticians.

In a book with so much focus on acoustic phonetics it would have been nice to have had references to computer programmes for acoustic analysis of speech. Several such programmes are available for free via the internet (eg. SIL Speech Analyser http://www.sil.org and Praat http://www.praat.org). Access to such a programme would allow the reader to explore acoustic phonetics for themselves and come to a better understanding than is possible from merely reading a book. No audio recordings are available to accompany the book, such a resource would aid the reader in understanding the articulatory and acoustic descriptions given.

Whilst reading the book I sometimes felt that I was being presented with long annotated lists to be memorised. On occasion more explanation could be included. For example, in the chapter on phonation, the laryngeal cartilages are presented but the muscles connecting them are not, and the physiology of the larynx is not fully related to the descriptions of difference states of the glottis. I believe that more attention to the interaction of muscles and cartilages in the larynx would actually make it easier for the reader to understand how voiceless, voiced, and whispered sounds etc. are made. Line drawings are introduced on page 25, they represent the (possibly overlapping) actions of different articulators along a continuous time scale. More explanation of the theoretical and practical significance of this parametric representation compared to the temporal-segmentation system represented by phonetic symbols could have been included here. Also, whilst the labial, coronal, dorsal and velic levels in the line drawings have separated lines representing an opening between the articulators and a combined single line representing closure of the
articulators, the glottal level uses a single flat line to represent voiceless sounds, when in fact voiceless sounds are made by opening and not closing the glottis.

Whilst descriptions are generally clear, further editing is needed in places. For example:

**Fricatives** are the sounds made with a small opening, allowing the air to escape with some friction. The escaping air is turbulent and produces a noisy friction-like sound, called *friction*. The fricatives in English are /f v θ ð s z ʃ ʒ w/ Here, the lower articulator is close to the upper articulator, but not so close that the air cannot escape, creating friction. The essential components of a fricative are obstructed air-flow with friction. (Page 23, bold in original)

This description of fricatives is clearly in need of improvement, rewording and the use of diagrams and sample words to illustrate different manners of articulation would make it easier for the reader to understand. Poor phrasing elsewhere may also confuse the reader, for example:

The sounds /θ/ and /ð/ are apical, that is, the tip of the tongue is near or just barely touching the rear surface of the teeth. (page 20, bold in original)

The words “near or just barely touching the rear surface of the teeth” form part of the description of the particular sounds mentioned, but are not part of the definition of apical as misleading suggested by the wording.

Some choices in the presentation of material may confuse readers. Voiceless non-aspirated and voiceless aspirated bilabials, [p] and [pʰ], were used to illustrate the concept of predictable allophonic variation, but then in the next paragraph the same sounds were used to illustrate free variation (pages 45-46). More emphasis needed to be made here on the importance of context, the fact that the variation is free word finally but predictable elsewhere. Alternatively, it may have been wiser to initially choose different pairs of allophones to illustrate the different types of variation. The sound symbolised as [h] is introduced as a voiceless vowel homorganic with the following voiced vowel. Whilst this is a legitimate analysis from a phonetic point of view, it may have been wise to warn the reader that the standard description of this sound is as a glottal fricative ([h] is first introduced on page 35, the glottal fricative analysis is mentioned on page 56 as the description found in “some books”).
In some cases the material presented is incorrect. The model presented for vowel production is the tongue arch model, a model which clearly does not match the facts (Wood, 1975). Despite the extensive material on vowel formants, no mention is made of the technique of plotting the first and second formants to produce a graph which closely matches the positions of vowels on the IPA vowel chart. Surprisingly, *Theoretical and practical phonetics* did include a subsection addressing these problems in vowel description, but this subsection was not included in *The sounds of language*.

There are occasional transcription errors. For example, Spanish taps and Trills are given as dental (page 221) but both Quilis (1993) and Martínez Celdrán (1994) describe them as alveolar. The final sound of German *ach* and *Bach* is given as a velar fricative (page 210) but the allophone before a low vowel should be an uvular fricative (Kohler, 1999).

Some errors are clearly typographical including the following. The symbol for a voiceless dental fricative [θ] appears in the English vowel inventories on pages 31 and 33. The symbol for a high back lax vowel /ʌ/ appears in the phonemic transcription of the word *fur* in Scottish English (page 114) even though this phoneme does not exist in Scottish English, Wells (1982) has a mid central lax vowel /ʌ/ in this word. On page 195, examples are given for the transcription of laminodentals and apico-dentals but the diacritics are no different to that given for laminoalveloar. On page 62ff, orthographic representations are written in square brackets giving the impression that they are phonetic representations. The symbol for a voiceless bilabial fricative is consistently mistypeset throughout the book as [φ], rather than the IPA approved [ϕ] (the former is not listed in International Phonetic Association, 1999, and Pullum & Ladusaw, 1986 state that it is not used in transcription).

**Conclusion**

Many of the weaknesses referred to above could easily be remedied by the instructor of a phonetics course, and non would present unsurmountable problems to the individual reader, especially if they also read other introductory textbooks. Other textbooks such as Ladefoged (2000), and Laver (1994) have technically superior explanations of phonetic facts and theories. However, on the strength of the pedagogically orientated organisation of *The sounds of language* I would recommend it for an introductory course, or as the first textbook that an individual reads.
References


Author Note

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Typesetting notes:

\( \theta \)  Theta (unicode 03B8)

\( \delta \)  Eth (unicode 00F0)

\( \� \)  Esh (unicode 0283)

\( \� \)  Ezh, tailed Z (unicode 0292)

\( \Lambda \)  Turned W (unicode 028D)

\( \upsilon \)  Upsilon (unicode 028A)

\( \lambda \)  Turned V (unicode028C)

\( \phi \)  Greek small phi (unicode 03C6) with a descender and no ascender

\( \phi \)  Latin small phi (unicode 0278) with both an ascender and descender