Ideas behind the phonemic chart

Looking at the chart

The phonemic set

Every spoken language has its own set of sounds. A characteristic of this set is that all the sounds within it exist in some sort of relationship to each other, each sound helping to shape the contours and boundaries of its neighbours. I refer to this set as the phonemic set. This chart shows the phonemic set of English as a complete and consistent system, to be worked with as one organic and interacting whole.

Why these symbols?

The symbols which are used on the chart to represent the sounds of the English phonemic set are taken from the International Phonetic Alphabet. These are the symbols used by most learner dictionaries, so working with them will also help learners develop the skills of finding for themselves the pronunciation and stress of any word in a learner dictionary.

Phonemes and allophones

A phoneme is the smallest sound that can make a difference in meaning. So if you change one phoneme for another you change the word. The word mine changes to pine and to shine if you change the phoneme /m/ to /p/ to /ʃ/. There are forty-four such significant sounds, or phonemes, in standard British English.

Each phoneme has a variety of allophones, slightly different and acceptable ways of saying the sound without changing the meaning. In this sense allophones are not significant. For example, /p/ has spread lips in peel and rounded lips in pool, but both varieties are regarded as being the same phoneme.
The layout of the chart

The forty-four phonemes of standard English are presented on the chart in a significant visual relationship to each other. Built into this design are references to how and where in the mouth each sound is produced, and so there are many clues in the design that can help in recognizing, shaping, correcting and recalling the sounds. Each symbol has its own box and pointing to this box selects that particular sound for attention. It can be useful to think of the box as containing all of the allophones of the sound.

The stress and intonation symbols

The primary and secondary stress symbols as used in most dictionaries are shown in the top right-hand corner of the chart, and beside them the five basic discourse intonation patterns (ie fall, rise, fall–rise, rise–fall and level) are shown in one composite symbol.

Sample words and decorations or a sparse chart?

I have received from teachers a number of decorated versions of the phonemic chart. The additions and decorations usually include one or two of the following: some include sample words within each phoneme box (eg tree in the /i:/ box), some have a picture instead of the sample word in the phoneme box (eg a picture of a tree in the /i:/ box) and some sculpt the symbol itself into an object whose English name contains that sound (eg the /i:/ symbol shaped into a tree). Some use colour, either at random for decorative effect, or to convey particular information (eg different colours for ‘more difficult’ sounds, or to indicate sounds ‘not occurring’ in the mother tongue of a particular learner group).

I encourage teachers and learners to find what works best for them, but I prefer to keep the chart sparse. There are drawbacks to including sample words or pictures on the chart:

- Sample words can be mispronounced or learned inaccurately in the first place.
- If the sample word contains an awkward sequence of sounds for certain mother tongue speakers then other sounds in the sequence may be distorted.
- Each phoneme can have a number of individual variations (allophones) depending on the phonemic context. A single sample word supplies only one of those variations, whereas a symbol represents a whole family of variations.
- The learner is tied to a sample word once it is printed on the chart. This can discourage them from choosing different and more relevant models as they become more discriminating.
- Pictures have additional problems in that they can be culture bound as well as ambiguous.

For these reasons I am reluctant to associate a phoneme permanently with one sample word, though temporary associations are of course helpful. The sample phoneme list inside the front cover is useful as a starting point, and for reference, but I hope and expect that learners will grow out of it quite quickly. Exercises in which learners find their own example words and then list them in their notebooks, or on the board, or on a poster, or even stick them temporarily on the chart, can all be helpful and illuminating as temporary measures.
An aim of this approach is to help learners to form their own images and develop their own associations with the chart, rather than find the chart already loaded with someone else's associations. In this respect providing less may allow for more.

Using the chart

Permanent display of the chart

The chart is designed for permanent display at the front of the classroom, so that it can be referred to at any moment during any lesson, and for a variety of different purposes (e.g., presenting, practising and diagnosing learners' perceptions of sounds, reshaping sounds, etc).

The chart as map

The chart is not a list to learn, but a map representing pronunciation territory to explore. Like any map it can help in two ways: it can help travellers to become more familiar with areas they have already visited; and it can help travellers to be clear about which areas they have yet to explore.

Learn sounds not symbols

The symbol is not the sound, just as a church or a lake on a map is not actually a church or a lake! The aim of this approach is to experience sounds and sequences of sound in a personal, physical, muscular way, and to use the phonemic symbol as a visual hook for that physical and auditory experience. It is sounds that are being studied, not symbols.

Activating the chart

You and your learners can activate the chart by touching the sound boxes singly or in succession with a pointer. This is either to initiate sounds or speech from others, or to respond to sounds or utterances made by others. The basic rule is either point then speak (i.e., someone points out sounds or sequences of sounds after others have said them), or speak then point (i.e., someone speaks while another tries to point out all or part of what they have said). You can establish these two basic patterns within the first few minutes of using the chart. On pp. 100–106 you will find seven modes of using the chart. The even number modes correspond to point then speak, and the odd number modes correspond to speak then point.

Three levels of study

The Sound Foundations approach enables the focus of pronunciation work to move elegantly, and on a moment-by-moment basis, between individual sounds, individual words, and connected speech. Thus micro and macro work can be integrated in precise response to the pronunciation needs of the lesson as it unfolds.

Level 1: Sounds

This level aims to develop in teachers and learners a deep and internally experienced awareness of how they produce sounds by manipulating their vocal
musculature, and how the internal sensation of using the muscles relates to what is heard through the ears. The development of this awareness enhances learners’ ability to change and modify how they use their musculature to produce new or different sounds.

Level 2: Individual words

Words spoken in isolation consist of a ‘flow of sound’ which is different from the sum of the individual phonemes. Neighbouring sounds modify each other as the vocal muscles join them together and take short cuts. Also, in multi-syllable words, distribution of energy across the syllables creates an energy profile, called word stress, that is typical and generally characteristic of a particular word when spoken on its own.

Level 3: Connected speech

Words flow together to make a stream of speech that is different from the sum of the individual words. Sounds are simplified and reduced, and the energy profile is extended from individual words to groups of words, that is from word stress that is relatively fixed to prominence (emphasis) and intonation (music) that is chosen by the speaker. This energy package, held together by the pattern of pitch and prominence, is called a tone unit.

Each of the three levels invites a different focus of attention and each can be called on separately or in combination to meet the needs that arise at any moment in a lesson.

Which model of English?

The phonemic symbols on the chart are generally taken to refer to British English Received Pronunciation (RP). Where the target for learners is a modified RP or a different accent then the relevant symbols can be changed or given different values.

Conventional pronunciation materials

The chart is designed to be used without conventional pronunciation materials, by exploiting material from the coursebook and from classroom interaction for use in pronunciation work. However you can easily integrate the use of the chart with conventional pronunciation materials, thereby adding a new dimension to such work.

Guiding principles

For language learning and teacher training

The phonemic chart is designed for use with learners and teachers of English at all levels. It is also designed to help you, the teacher, to develop your own awareness of pronunciation, and to discover new and practical ways of perceiving, diagnosing and responding to your learners’ pronunciation needs.
Multisensory

Pronunciation is the physical side of language, involving the body, the breath, the muscles, acoustic vibration and harmonics. When attention is paid to this fact, studying pronunciation can become a living and pleasurable learning process. This approach is holistic in that it allows learners to work from their individual strengths and to develop their own more vivid learning styles. Pronunciation can become physical, visual, aural, spatial, and affective as well as intellectual.

Assumptions and values

The values and beliefs about learning and about people that underpin this approach are essentially humanistic, holistic and positive in their view of what learners are capable of under the right conditions. The Sound Foundations approach to teaching and learning goes beyond content and technique, and takes into account the psychological dynamics of learning and the creation of an atmosphere conducive to learning. An assumption in this book is that motivation and enjoyment arise naturally when the deep-seated human predisposition to learn, to experiment and to search for order is creatively engaged.

Key to phonemic symbols

<table>
<thead>
<tr>
<th>i: see</th>
<th>/si:/</th>
<th>e egg</th>
<th>/æ/</th>
<th>æ cat</th>
<th>/æt/</th>
</tr>
</thead>
<tbody>
<tr>
<td>r sit</td>
<td>/sɪt/</td>
<td>a away</td>
<td>/æwɛr/</td>
<td>ð up</td>
<td>/æp/</td>
</tr>
<tr>
<td>u good</td>
<td>/ɡʊd/</td>
<td>ð: her</td>
<td>/ðɛr/</td>
<td>o: ask</td>
<td>/əʊsk/</td>
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<tr>
<td>u: two</td>
<td>/tu:/</td>
<td>ð: four</td>
<td>/ðfɔər/</td>
<td>ð: on</td>
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<td>ŋ here</td>
<td>/hɛər/</td>
<td>ð: cure</td>
<td>/kjuə/</td>
<td>ea there</td>
<td>/eə/</td>
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<tr>
<td>ð: eight</td>
<td>/eɪt/</td>
<td>ð: one</td>
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<tr>
<td>ð: boy</td>
<td>/bɔɪ/</td>
<td>ð: at my</td>
<td>/meɪ/</td>
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<tr>
<td>ð: no</td>
<td>/nəʊ/</td>
<td>ð: ao now</td>
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<tr>
<td>t: pen</td>
<td>/pɛn/</td>
<td>f five</td>
<td>/fɪv/</td>
<td>m me</td>
<td>/mi:/</td>
</tr>
<tr>
<td>b bee</td>
<td>/bi:/</td>
<td>v very</td>
<td>/ˈvɜrɪ/</td>
<td>n nine</td>
<td>/naɪn/</td>
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<tr>
<td>t ten</td>
<td>/tɛn/</td>
<td>ð: thing</td>
<td>/θɪŋ/</td>
<td>ð: long</td>
<td>/lɔŋ/</td>
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<td>d do</td>
<td>/dəʊ/</td>
<td>ð: this</td>
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<td>h house</td>
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<td>jf chair</td>
<td>/dʒeə/</td>
<td>ð: so</td>
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<td>l love</td>
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<td>/dʒʌst/</td>
<td>ð: zoo</td>
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<td>/ʃi:/</td>
<td>w we</td>
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</tr>
<tr>
<td>g go</td>
<td>/ɡoʊ/</td>
<td>ð: pleasure</td>
<td>/plesə/</td>
<td>j yes</td>
<td>/ʃes/</td>
</tr>
</tbody>
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