ABSTRACT. The author's newly compiled Longman Pronunciation Dictionary [5] is not restricted to British RP but also covers American English. Like EPD [2], it gives extensive coverage to inflected and derived forms; unlike EPD, it has entries for affixes and compounds, and offers spelling-to-sound guidelines. Entries incorporate new treatments of epenthesis, syllabic consonants, and "compression" consonants, an
(varisyllabicity).

For nearly a hundred words where competing pronunciations are known to be in use, LPD reports the findings of an opinion poll of speaker preferences - the largest such poll ever conducted.

## 1. INTRODUCTION

The Longman Pronunciation Dictionary (LPD) [5] was published last year as the culmination of four years' work.

There are three principal things, missing from ordinary dictionaries, that a pronouncing dictionary can offer : information on variants, on inflected and derived forms, and on proper names. All these are in LPD, along with guidance on English spell-ing-to-sound rules, on the pronunciation of combining forms and affires (and the effect they have n word stress) and on English phonetics in general.

There was of course already in existence an excellent pronouncing dictionary for English: the classic EPD [2] compiled by

Daniel Jones over seventy years ago and more recently revised, first by Gimson and now by Ramsaran. The aim of LPD was to improve upon it.
1.1 Variant pronunciations

Many English words are pronounced in more than one way. As well as the recommended or most usual pronunciation of a word (not necessarily the same thing!), LPD records also the variant pronunciations in common use: not only those considered to fall within RP, but also a limited range of variants from non-RP British English (regional forms restricted to particular parts of the British Isles). Thus as well as again with both /e/ and /er/, LPD also shows one with northern /o/ alongside the usual $/ \Lambda /$, and solve with the southern /au/alongside /v/. Also, more importantly, it gives the General American forms, so catering for those EFL learners who taken AmE as their model. The entry for tomato reads to 'ma:t ou \| to 'meit ou --where $\|$ introduces an American pronunciation, here with the characteristic American voiced $t$, judged so salient an allophone as to demand explicit notation. There are also occasional references to Scottish (though), West Indian (Bridgetown), Irish (name of the letter H) and other varieties from outside England.

Extensive listing of variants creates the danger of making the dictionary difficult for the ordinary EFL student, who just wants advice on the pronunciation he
should use. LPD helps this kind of user by putting the recommended form in colour (blue), and the other possibilities in less conspicuous black. If the recommended British and American forms are different from one another, then both are printed in colour.
1.2 Inflected and derived forms

These are not always readily inferred by a dictionary user, even if they are regularly formed. He may know that breathe is bri:t, yet hesitate about breathed and breathes. It is useful to be able to check them explicitly.
1.3 Proper names

Ordinary dictionaries contain few proper names. Yet the spelling is a notoriously unreliable guide to their pronunciation. So LPD offers good coverage of names of

- people (forenames - Angharad. Graham, Ralph, and surnames Gyngell, Marioribanks, McElhone, Wheway; literary characters Gradgrind, Lear Peter Pan; gods, heroes, and figures of myth and legend - Thor, Hephaestus, Robin Hood);
- places (not only in Britain, as Gloucester and Chiswick, and the less well-known Lympne, Stivichall, and Meols; but also in Ireland (Laois, Drogheda), North America (Poughkeepsie, Spokane), South Africa (Uitenhage) and Australia (Whyalla), as well as many hundreds in non-Englishspeaking countries); and
- commercial firms and products, such as the Weetabix we eat for breakfast or Exxon whose petrol we buy; and on from Aspro tablets, Armalite rifles, and Araldite glue, through Gauloises, Givenchy and Gucci, Pepsi-Cola, Pernod and Perrier to Winalot dog food and Y-fronts underwear.
- pop music -- not only the Beatles, Lennon and McCartney (all missing from EPD!) but also Bananarama, Sade, and Yazz.

Proper names, too, have inflected forms. A Porsche car, inflected forms. A Porsche car,
disyllabic in German, is monosyl-
labic in English, but has a disyllabic plural. A Mercedes, on the other hand, often has a plural identical with the singular, like series.

All told, LPD contains about 75000 headwords, of which about 15000 , one-fifth, are proper names.
1.4 Foreign languages

Where a word or name is from a foreign language, LPD usually records the pronunciation in the relevant language, too, as well as the anglicization. In this way it includes over a thousand items with their French pronunciation in IPA (au fait, hors d'oeuvres, Sartre); likewise $>400$ German entries (Berlin, Fräulein, MunichMünchen), c300 each Italian and Spanish, >240 Welsh, >130 Russian (Chernobyl, glasnost. Gorbachev), $>70$ Hindi, >60 Japanese (Kyoto sumo), $>50$ Dutch, $>40$ Arabic, and in fact items from a total of 51 languages other than English.
1.5 Speech technology applications LPD was compiled in machinereadable form and can thus in principle be made available as an electronic database. In speech recognition a pronouncing dictionary look-up can be used in order to match an incoming signal against possible lexical strings; in speech synthesis its usefulness is obvious, given the uncertainty of English spelling-to-sound rules. No comparable machine-readable database exists. (Enquiries should be addressed to the publishers, Longman.)

## 2. NOTATION

The transcription system is essentially the "EPD-14" IPA notation employed in the current, fourteenth, edition of EPD and by many other writers, particularly in the EFL sphere. This differs from older notations in that the distinction between paired long and short vowels is symbolized both by separate letters and by presence/absence of length marks: leap li:p, lip lip; food fu:d, good
gud; caught (BrE) ks:t, cot (BrE) kot. Nevertheless, both theoretical and practical considerations have forced certain minor modifications to EPD-14, as follows.
2.1 Neutralization of high vowels The weak final vowel in words like happy, coffee, valley is in RP traditionally equated with $/ \mathrm{I} / \mathrm{F}$ Many speakers, however, identify it rather with /i:/. Phonologically we have a neutralization of the phonemic opposition. I have followed others [3, 4] in employing the symbol $i$ (lower case, no length marks) in positions of neutralization, and also $u$ for the corresponding /u:-u/ neutralization: happy 'hæp $i$, radiate 'reid iert; evaluate 1 'væl ju ert. 2.2 Provision for General American Since LPD also covers AmE, the EPD-14 system needs certain extensions, chosen in such a way as to harmonize with the notation used for BrE RP while drawing attention to salient phonetic differences. A regrettable consequence is that LPD does not follow any established AmE notation such as Kenyon \& Knott, or Pike, or Smith \& Trager.
lot lot || la:t;
thought $\theta$ o:t $\| \theta 0: t, \theta a: t$;
know nəu || nou;
nurse n3:s || ns:s;
farmer 'fa:m o \|| 'fa:rm ${ }^{\text {or }}$;
atom 'æt əm\|'æt əm.
The explicit symbolization of voiced /t/ is helpful to the $A m E-$ oriented EFL learner: few other dictionaries give this information. 2.3 Resolution in prospect

The problem of rival phonetic transcription systems will soon be solved by software. Users of an electronic database will be offered output in any notational system they choose, through an automatic lookup table.
3. UNDERLYING vs. SURFACE FORM A general problem facing any phonetic transcriber is that of abstractness. How far should the analysis and the corresponding notation attempt to shadow the
phonetic details of the utterance rather than abstracting from this into phonological entities believed to underlie them? The moderate degree of abstractness implied in taxonomic-phonemic analysis is generally acceptable (though even here there may be murmurs about dark l's, glottal stops, and "long" vowels that are physically short).
An extreme abstractness such as found in SPE [1] is obviously quite inappropriate for the needs of most potential users of a pronouncing dictionary.

A number of related issues call for discussion. Here are some of them, with the solutions adopted in LPD.

### 3.1 Assimilation

Include is usually pronounced with a nasal which for some speakers is perhaps always velar, for others occasionally alveolar. Some, but not all, have a psychological awareness of the morphology (compare exclude). Given an analysis that treats /n/ as phonemic, with a corresponding transcription, should the main entry have $/ \mathrm{n} /$ or $/ \mathrm{y} /$ ? LPD gives $/ \mathrm{n} /$, with an /n/ variant marked $" \rightarrow$ " ("derived [from first form] by automatic rule'). So too spaceship with /'spers-, $\rightarrow$ 'sper $\int-/$.
3.2 Epenthesis

In LPD the established convention of an italicized symbol to show possible omission is applied to capture AmE nt-reduction (painting 'peint in), recorded nowhere else. The further convention of using a small raised symbol to show a possible insertion caters nicely for intrusive $/ \mathrm{r} /$ ( BrE thawing ' $\theta$ oir ID ) and for other types of epenthesis (fence fents, spiral 'spar ${ }^{\text {r }}$ ol).

### 3.3 Syllabification

Transcribed forms in LPD are divided into syllables by spacing, which is intended to make them easier for the user to process mentally. Syllabification is based on the principle of attraction to stressed syllables, which (I claim) affords a more elegant statement
of allophonic distribution than do rival theories.

### 3.4 Syllabic consonants

Arguably, all syllabic consonants in English are in alternation with sequence of [ $\partial$ ] plus the corresponding non-syllabic consonant. LPD adopts this assumption, showing syllabic consonants by with either an italic [ə] or a raised [ ${ }^{\circ}$ ] (using the conventions previously discussed). So sudden is written 'sud ${ }^{\circ} \mathrm{n}$, implying $a$ preference for syllabic [ p ], but distant as 'distont, implying s preference for [on]. AmE [r] is analysed as syllabic $r$ and written accordingly: AmE manner ${ }^{\prime}$ men ${ }^{\circ} \mathrm{r}$. 3.5 Compression and smoothing

The number of syllables in an English word may be variable: we can often compress two syllables into one. Thus listening, for instance, may have three syllables or two; likewise lenient. Choice of variant may depend on stylistic or pragmatic factors. This varisyllabicity is shown by a special convention in LPD, thus


The phonological environment for compression is typically a sequence of two weak-vowelled syllables, the first of which loses its syllabicity. The rule is, however, subject to lexical constraints (contrast battery and beggary).

Combining these treatments of potential syllabic consonants and compression, we achieve notably succinct entries for such words as national 'næf $0_{v}$ ol and liberal 'lib ${ }^{\circ} r_{c}$ ol: each of these conflates what Jones would treat as six distinct variants.

By smoothing I refer to the RP tendency for a stressed vowel to be simplified when immediately followed by a weak vowel. A diphthong in this environment, if smoothed, loses its second element; a high vowel becomes lax. Thus in client the /ar/ may be smoothed to [a] before $/ \sigma /$. In ruinous the /u:/ may become [u] However, these sequences are also
subject to the possibility of compression. LPD's entries read 'klaruont, 'ru:uIn as.
(An actual triphthong in client, i.e. compression without smoothing, is in my opinion rare.)

## 4. THE OPINION POLL

Reflecting about the problem of authority, I resolved to conduct an opinion poll for nearly a hundred words where competing pronunciations are known to be in use. LPD reports the preferences expressed by panel of 275 native speakers of British English.

The panel consisted mostly of academic phonetics/linguistics specialists, school or college teachers, radio announcers, and speech scientists.

The survey revealed that in zebra /e/ is heavily preferred over /i:/, in accomplish / $/ \lambda$ / over $/ \mathrm{o} /$, in deity $/ \mathrm{er} /$ over $/ \mathrm{i}: /$, and in year $/ \mathrm{I} \partial /$ over $/ 3: /$. In nephew, /f/ has largely displaced /v/; suit is now usually said without $/ \mathrm{j} /$. Three out of four respondents prefer often with no /t/.

## REFERENCES

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[3] LDOCE $\equiv$ Longman Dictionary of Contemporary English, 1978. Second edition, 1987. Longman.
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