This is not a handbook of historical linguistics nor a specialist history of English but a detailed study of the nature of 'linguistic evolution' which the author equates with linguistic change but which is not a development in an upward or better direction. As a language 'evolves' it has two opposing principles in it: conservatism and inertia which lead to pressure points which vary from period to period. These are usually intralinguistic and it seems as if the term 'evolution' is applied to how these pressure points develop. Although the causation of linguistic changes is the author's main concern he also purports to deal with the 'how' of linguistic changes as well. Changes inevitably take place and the conditions of these changes must be examined - the 'how' of linguistic change - then the factors which govern these changes must be ascertained - the 'why'. Whereas in the past linguists have sought for a single cause of linguistic change in general or linguistic changes in particular, the author pleads for 'multiple conditioning'. This point of view is now more widely accepted (cf. Malkiel 1967, Wang 1969). Since transformational-generative grammar does not seek to find the causes of linguistic change the author feels that it need not be taken into account in any discussion of the causes. However the view he cites is also taken as being extreme by other transformationalists such as King (1969: 191): "If there is little risk in being a cynic about the origin of phonological change, there is also little profit. In fact, linguistics has a great deal to lose by the position that the cause of phonological change is beyond principled research". King does not however advance any real causes himself. Chomsky and Halle's lack of concern for causes of linguistic change have been criticised by Vachek (1970: 28f).

In studying linguistic change the nature of the evidence is all important. In the synchronic study of language one can distinguish easily between the written and spoken language but not so in the historical study of language: "In practice ... there is little chance of keeping the two media distinct" (p.5). The way in which one can relate the graphemes to the phonemes and reconstruct as far as possible the pronunciation of language with only written records is only summarily dealt with in less than a page. Even though the methods are well known it seems a pity that not much more detail was given. A basic article on this problem is Penzl (1957) which is not mentioned in the bibliography.

The various factors in linguistic change are next enumerated and set out in a diagram. (In fact a lot of what the author says is illustrated by diagrams and there are quite a few useful maps). The basic division is into intralinguistic and extralinguistic factors which seems self explanatory and the intralinguistic factors are then divided into intrasystemic and extrasystemic the latter being used for those factors "that influence a system from outside it as a result of contact with another system..." (p. 7), which can be from another language or another variety of the same language. In chapters two to five linguistic change is regarded as intrasystemic and in chapter six, called 'Diversity and Contact', it is regarded as extrasystemic. Within intrasystemic change a distinction is made between mechanical variation in the spoken chain, which is dealt with in chapter two for phonology and in chapter four for grammar and lexis, and systemic regulation which in chapter three deals with the phoneme and in chapter five with grammar and lexis.
This distinction between variation originating in the spoken language and being adopted into the system is to be found in De Saussure (1915: 37, 138). The author distinguishes two types of variation in the spoken chain: assimilatory changes of contiguous segments, and isolative changes, where the variants come from different styles. All through his discussion the author stresses that "the variants are of mechanical origin and are continually present in the spoken chain" (p. 26), and how they develop depends on whether they are selected by the system. The examples of assimilatory changes are nearly all of sound-changes and it would have been helpful if more examples had been given of sound-changes and synchronic variants in parallel. The variations described cannot be regarded as universals, although one has the impression that they are presented as such, but not explicitly. The changes listed are important, not because they are universals (examples of exactly the opposite of most of the variations suggested can be thought of), but because they do occur with some frequency and in languages geographically far apart. The devoicing of final consonants is found in German, Russian and Turkish but it does not occur for instance in French, English and Serbo-Croat. The vocalization of a velar [ŋ] is found in Dutch, Scots, Central Bavarian and Serbo-Croat, in which latter language it has lead to a morphophonemic alternation between an [ŋ] and an [ŋ]: budem pisao 'I have written' (male speaker), budem pisala 'I have written' (female speaker), but other languages do not show this change. At the present we still only have very hazy ideas about universals in historical phonology on the phonetic level - a detailed catalogue of all recorded changes, even if only in European languages, would help us further in this field. The most that can be said - as the author admits - is that they are mechanical in origin - but it has long been recognized, that variation is characteristic of the spoken chain (King 1969: 108, Bloomfield 1935: 76). Isolative change is seen as affecting vowels more than consonants. Variants arise in different styles - diphthongs may be raised in a 'forceful' style or lowered or centralized in a 'relaxed' style. This has been observed in English and other languages. Variation of mechanical origin in the spoken chain 'explains' how conditioned and isolative changes arise.

Variation in lexis and grammar is also seen as arising on the level of the spoken chain. The parallel with sound-change is most easily seen on the level of lexis in the "fluidity between forms and their referents" (p. 52), which parallels phonetic variation. On the grammatical level the prime motive for variation is "inertia or accident in the spoken chain" (p. 58), forms are extended to other contexts, in English for instance the plural ending -s has been extended from one class of nouns to nearly all nouns. The concept of analogy is treated under this heading. Extension of forms may be affected by the quantitative distribution of inflexions and the syncretism of grammatical functions or categories is usually the result. Provision of new grammatical units is by intake from lexis or grammaticisation. Semantic units lose their full meaning by being used in an increasing number of contexts: an example is get, do as an auxiliary and suffixes from nouns like -hood, both of which are not mentioned, would presumably be other examples. Changes of 'class' and 'rank' also occur, prepositions often derive historically from adverbs. Lexis takes in new forms through borrowing or word-formation. These changes or variations in grammar and lexis are seen as cases of 'aberrant selection' as against "inaccurate or ineffective articulation" on the phonetic level (p. 60). Most of the parallelism seems plausible and it is to the author's credit to have tried to weld the factors together showing how similar mechanism are at work.
Having shown how variation can arise the author next goes on to look at
the factors that are available and pertinent to their choice for adoption
into the system. On the phonological level the unit discussed is the tradi-
tional phoneme and not the systematic phoneme. Phonological space may
force a phoneme to change in one direction rather than another but as well as
taking it in its usual paradigmatic sense it could also be applied to the
distribution of phonemes. For instance before /t/ in English the vowel [ɔ]
can occur either long or short - some speakers use one form others the other
but since there is no phonemic contrast in this position this variation can
occur quite readily. When discussing push-chains and drag-chains the author
makes the very good point that their operation "varies somewhat according to
whether the system in question is vocalic or consonantal" (p. 32). Gradual
changes are more typical of vowels, whereas changes between consonants are
often not gradual but involve a change of feature. An example would be the
oft quoted Romanian shift of /k/ to /p/. Most of King's examples of sudden
sound-changes are consonant changes (1969: 115), and this distinction helps
towards solving this controversy. I only know of one example of a 'leap' in
vowel change, and that is the lowering of Middle High German short /i/ to /a/
in certain contexts in Luxemburgish: MGH kint, Lux. kant; MGH ist, Lux. as,
but the conditioning of this change is not clear. Other factors affecting
the development of phonemes in a system are their integration, functional yield
and the symmetry of the system itself, but as is admitted these are notoriously
difficult to evaluate. Next phonemicization and split are dealt with and the
author admits that the origin of split is mechanical rather than systematic;
phonetic divergence arises and through various 'accidents', another change, or
borrowing, the variants are phonemicized. Curiously enough changes in spelling
resulting from split are not mentioned and here surely is where the only really
tangible evidence for the fact that the variants have become phonemes is to be
found, even allowing for the conservatism of spelling. Despite their dramatic
nature, splits whereby a new phoneme is introduced into a language do not seem
to be very common but we can only really be sure when we have more detailed
information, like a catalogue of sound-changes. Other changes mentioned are
'fusion' and 'split with merger'. 'Fusion' seems to me not to be a type of
phonological change at all but rather a mechanism which brings about a phono-
logical change. Sometimes it may produce a new phoneme as in the case of /ʃ/
in late Old English or the resultant sound may merge with an already existing
one; for example the sequence vowel + nasal + voiceless fricative in Germanic
became long vowel + voiceless fricative in Old English: Gothic gams, munbas,
finf; Old English gōs, mōp, fē. (Moulton 1967: 1400).

'Split with merger' as the author rightly points out is merely a change
in the distribution of a sound but it is misleading to call it 'split', which to
my mind, should be reserved for the emergence of a new phoneme. These changes
in distribution of phonemes do in fact deal with many common changes in the
phonology of languages. Many changes do not in fact affect the number of
phonemes or their distribution but the phonemes all move round one place as it
were; the author calls this 'circular shift'. It may have a mechanical origin
but functional factors step in later, such as economy of features and sonority.
The author has to admit that 'circular shifts' are not the only reaction of a
sound system and shows how some dialects have preserved more distinctions than
the standard language. This can also be illustrated from Swedish and Norwegian,
both of which have undergone a circular shift but it has not involved any diaph-
thongization of the reflexes of Germanic long [i:] or [u:] but it has involved
a rise in tongue-height for all low and mid back vowels, a centralizing of
the high back vowel and a fronting of the front rounded high vowel — all without any mergers. At the end of the chapter on the phoneme and sound-change an interesting theory of phonaesthemes is expounded, the author can speak for himself: "Possible examples are to be found in the history of the phonaestheme /-ag/ 'slow, tired or tedious action', as in drag, fag, flag, lag, nag, sag; the only etymons that have been proposed for flag, lag and sag all end in /k/. Such a replacement of /k/ by /g/ differs entirely from the types of phonological change hitherto discussed. It is neither mechanical nor functional in origin within the phonological system; yet it is intrasytemic, and, so far as it is motivated, it is due to interference from patterns in the lexical, not the phonological, system" (p. 48). The only difficulty with this is the analysis of words into phonaesthemes which would probably cause disagreements among linguists but nonetheless it deserves attention. Systemic regulation is also to be seen in grammar and lexis, in the attraction of words to fill an empty semantic slot and in the avoidance of homonymy. Most of this chapter is about lexis but in grammar the main pressure is seen in the change from synthetic to analytic structure.

The largest chapter deals with 'diversity and contact' which is seen as one of the main causes of linguistic change. Diversity is regarded as something natural to language and different groups will select different variants. Contact can be either between different languages or different dialects of the same language. In contact between languages "grammatical, phonological and phonetic features may also cross language boundaries" (p. 95). One example cited is that of the spread of the uvular [R], but this is a difficult and unclear case. There are clear areas in Europe with uvular [R], France, Denmark and southern Sweden but it has been shown (Moulton 1952) that the development of a uvular [R] in German may be an autonomous development, as surely is the uvular Northumbrian [R]. The geographical distribution of apical and uvular [R] in Germany has not yet been fully clarified. Examples are then given of what happens when dialects come into contact with one another; compromise systems, or sounds, or forms may result. Although not mentioned, word-formation often gives striking examples of this. In Germany there are border areas in the map for the synonyms of 'potato' between areas with Erdäpfel and Kartoffel which show the compromise form Erdtöpfel. Sometimes a feature will be accepted by neighbouring dialects and an isogloss extends. Other factors mentioned which come into play in contact between dialects, whether social or geographical, are incomplete imitation, hypercorrection, 'affected' forms and the influence of the written language.

How does all this affect our view of how language changes, how linguistic changes proceed? The author emphasizes the geographical and social factors. Linguistic change and its distribution should be seen on a 'scale' from 'weak' changes, with complex or possibly no conditioning factors, to regular isolative changes. This latter is seen as advancing both by discrete as well as by infinitesimal steps but it is not unconscious as many people are aware of socially conditioned variants. The author deals with the difficulty of certain words representing the same sound, say in Middle English, having a different geographical extent (Map: p. 122) of their reflexes but his description would have been clearer if the concept of 'lexical incidence' had been used instead of 'distribution' which is rather overworked. Most of the examples used in this chapter are of sound changes and it would have been interesting if more grammatical or semantic ones had been used. Finally it is suggested that any extralinguistic factors in linguistic change do not run counter to intrasytemic ones.
Having examined linguistic change in detail the author nexts argues that neither a wholly mechanistic nor a wholly functional approach can deal with many factors in linguistic change and he goes on to outline a framework for describing linguistic change. In essence this has been mentioned before but in chapter seven the author describes it in detail. Linguistic change is seen primarily as a 'process of selection' (p. 139), and the author's framework comprises "two levels, spoken chain and system, linked by the process of selection" (p. 139). Roughly these two levels correspond to De Saussure's distinction between 'la parole' and 'la langue', but system as the author understands it comprises "the total of accepted and intelligible norms, established by oppositions, in the same group and period" (p. 139), and also "the dialects of all groups, and the register distinctions applicable either to the main system or to its subcodes" (p. 140). This is certainly a wide definition but it includes all potentially relevant factors. Linguistic change takes place at both levels - sometimes a plethora of variants may arise in the spoken chain which provide obvious material for selection by the system (the author calls this a push-chain), whereas functional slots in the system may be filled by the selection of a variant from the spoken chain (drag-chain). The author's framework is all-inclusive and covers all possibilities. To show how it works he takes the phenomenon of the Great Vowel Shift in English and in particular the merger of Middle English /e:/ and /eː/ in /iː/. The three main exceptions to this, great, break, steak merged with /eː/, if they had merged with /iː/ they would have been part of a class of words with the phonaesthemes /iːk/ and /iːt/ which were contrary to their meaning (p. 151f. for a detailed description). The weakest point in the whole treatment is to my mind the origin in the spoken chain of the raised vowels and diphthongs which is only dealt with briefly. It links their rise with the apocope of unstressed /e/ and points to other parallel changes in the Germanic languages. Nevertheless it is a good illustration of the author's approach and shows how every factor for selection must be weighed carefully. The author then goes on to emphasize the ad hoc and non-universal nature of 'systemic regulation' and long term change. Extralinguistic factors, how migrations of people from East Anglia and the Central Midlands altered the character of London English are discussed, as is the interpenetrations of sub-systems like phonology and grammar. The author comes to the conclusion that the causes of linguistic change are threefold: "variation due to (a) inertia, and (b) differences of style; (ii) systemic regulation; (iii) contact" (p. 177).

There is not much with this thesis that many historical linguists would like to quarrel with and my own criticisms have been of minor points of detail. English specialists may want to take issue on some of the points of the history of English which form the main illustrations. Although transformationalists may reject this book because it is not couched in their terms, they would do well to examine some of the criticisms it makes of their approach to historical linguistics. The author is obviously well versed in the latest transformational-generative literature as well as that of sociolinguistics and he also makes reference to creole situations.

The book presents a balanced view of linguistic change, taking intra-systemic and extrasystemic factors into account, of which the theory of phonaesthemes seems to have been neglected. The factors have been known previously but the author welds them together into an integrated framework. To be welcomed is the treatment of grammatical and semantic change as well as phonological change, but most of the grammatical changes that are discussed are morphological
rather than syntactic. The main thesis of the book is the one which was put forward by the author in a previous article (Samuels 1965) but which has been extended considerably.

This is a book that one will want to come back to again and again and try to find further examples and counter-examples to the ones given. The maps and diagrams are very helpful. It is good to find someone is convinced that linguistic change is interesting and also important and worthy of serious academic study.

Charles V. J. Russ

REFERENCES


De Saussure, F. (1915) Cours de linguistique generale, C. Bally, A. Sachehaye eds. 5th reprint (1964) Paris (Payot).
