



# A Phonological Typology of English



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What does one mean by a  
phonology typology of English?



## A phonological typology will:



Offer an overall picture of the manner in which the phonological system of English evolved from its pre-stages in Germanic to the present-day varieties of the English language.

Provide a unified treatment of the historical phonology of English and the phonology of varieties of English throughout the world, both native speaker English ('Settler English') and second-language English ('New Englishes').



A phonological typology will:



Present a view of English phonology in the context of other Germanic languages. By this means light can be shed on specific English developments and their uniqueness within the group of Germanic languages can be highlighted.

## In a phonological typology of English

◆————◆

The possible sources of change are examined in detail. Both internal factors such as paradigmatic pressure within the sound system and external factors, e.g. contact with other languages and sociolinguistic factors, are considered.

The relationship of the phonology of standard English (both British and American) to that of various varieties is examined closely. In particular the manner in which the standard arose and how aspects of its phonology (stress patterning, vowel configurations, consonantal realisations) became fixed in the late modern English period, above all in the eighteenth century, is a major focus.

# A phonological typology of English



This project is informed by modern methods of data collection and analysis. It addresses current research issues in the field, such as language variation and change, new dialect formation, ‘New Englishes’, language shift and the question of whether creoles form a typological class on their own. The role of contact in the development of phonological systems is also to be treated centrally.



## Early 20th century studies which offer analyses of English phonology

There are older scholars, working largely in the first half of the twentieth century, such as the following:

Otto Jespersen

Karl Luick

Karl Brunner

Ferdinand Mossé

Alistair Campbell (Old English)

Richard Jordan (Middle English)

Eilert Ekwall (Early Modern English)



## More recent studies on English historical phonology

Among the more prominent scholars who have been active in this area are the following:

Roger Lass

Donka Minkova

Jeremy Smith

Joan Beal

James Milroy

April McMahon

Charles Jones

Robert Stockwell

Julia Schlüter

Richard Hogg

Jerzy Welna

Ricardo Bermudez-Otero





# Contemporary varieties of English

Among the scholars who have been working on the phonology of contemporary varieties of English are the following:

John Wells

David Britain

Peter Trudgill

Gerry Docherty

Walt Wolfram

Edgar Schneider

Umberto Ansaldo

Paul Kerswill

Paul Foulkes

Dominic Watts

J. K. Chambers

Daniel Schreier

Rajend Mesthrie

Thomas Klein

## Other contemporary phonologists

Within the broad remit of anglophone studies but with general phonological interests there are a number of contemporary scholars whose work has a bearing on the task of profiling present-day English phonology:

B. Elan Dresher

Aditi Lahiri

Joan Bybee

Paula Fikkert

Matthew Gordon

Theo Vennemann

John Harris

Keren Rice

Juliette Blevins

Peter Bakker



How does English match its  
genetic and geographical  
neighbours?



## English in the context of the Germanic languages

	English	Dutch	German	Swedish
Front rounded vowels	—	✓	✓	✓
Interdental fricatives	✓	—	—	—
Velar fricative, voiceless	—	✓	✓	—
Velar fricative, voiced	—	✓	—	—
Contrastive stress	✓	—	—	—
Contrastive tone	—	—	—	✓

## English in the context of the Germanic languages

	English	Dutch	German	Swedish
Front rounded vowels	—	✓	✓	✓
Interdental fricatives	✓	—	—	—
Velar fricative, voiceless	—	✓	✓	—
Velar fricative, voiced	—	✓	—	—
Contrastive stress	✓	—	—	—
Contrastive tone	—	—	—	✓

## English and the languages geographically closest to it

	British Isles + continental littoral					
	British Isles					
	Britain			Irish		
	English	Welsh	Scots	Irish	French	Dutch
Phonemic vowel length	✓	✓	—	✓	—	✓
Front rounded vowels	—	—	—	—	✓	✓
Nasal vowels	—	—	—	—	✓	—
Interdental fricatives	✓	✓	✓	—	—	—
Vocied sibilants	✓	—	✓	—	✓	✓
Velar fricative, voiceless	—	✓	✓	✓	—	✓
Velar fricative, voiced	—	✓	—	✓	—	✓
Alveolo-palatal fricative	✓	✓	✓	✓	✓	—
Voiceless sonorants	—	✓	—	—	—	—
Phonemic affricates	✓	—	✓	—	—	—
2 or more segment clusters	✓	✓	✓	✓	—	✓
Consonant pairs based on secondary articulation	—	—	—	✓	—	—

## English and the languages geographically closest to it

	British Isles + continental littoral					
	British Isles					
	Britain			Irish		
	English	Welsh	Scots	Irish	French	Dutch
Phonemic vowel length	✓	✓	— !	✓	—	✓
Front rounded vowels	—	—	—	—	✓	✓
Nasal vowels	—	—	—	—	✓	—
Interdental fricatives	✓	✓	✓	—	—	—
Vocied sibilants	✓	—	✓	—	✓	✓
Velar fricative, voiceless	—	✓	✓	✓	—	✓
Velar fricative, voiced	—	✓	—	✓	—	✓
Alveolo-palatal fricative	✓	✓	✓	✓	✓	—
Voiceless sonorants	—	✓	—	—	—	—
Phonemic affricates	✓	—	✓	—	—	—
2 or more segment clusters	✓	✓	✓	✓	—	✓
Consonant pairs based on secondary articulation	—	—	—	✓	—	—



# Research into the History of English





# Phonology in present-day historical linguistics

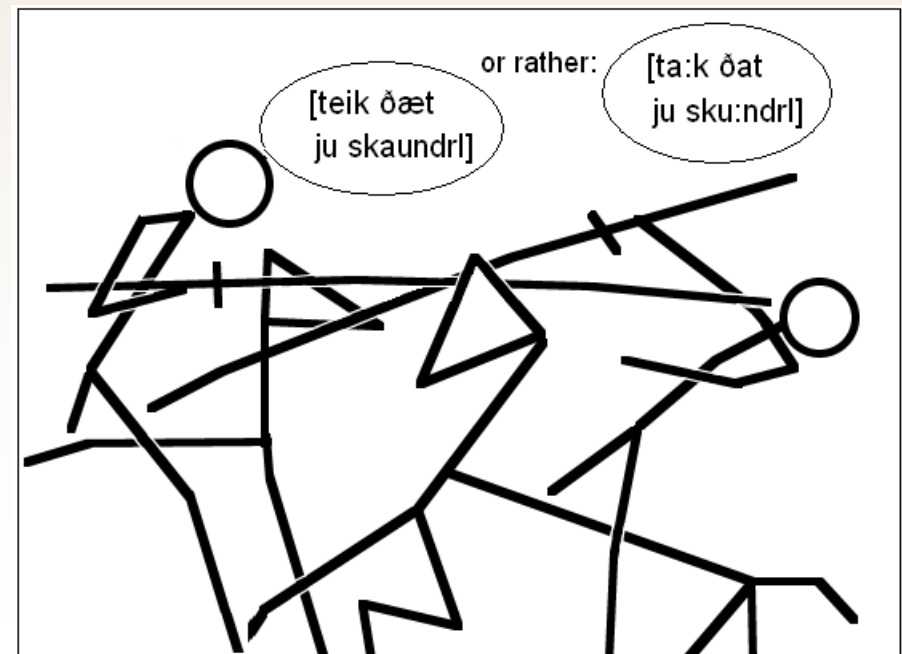
What are the concerns of young historical scholars nowadays?

Corpus linguistics; Grammaticalisation; Historical pragmatics.

Specifically, young historical scholars are concerned with:

Text linguistics and general philological issues (manuscript editions, cross-influences among authors, literary themes and tropes, adaptations).

But not phonology .....





# Phonological typology and phonological theory



My concern is with phonological typology, i.e. with describing the sound system of English from a structural perspective. This bears a certain relationship to phonological theory.

Common features:

Both scholarly activities are concerned with reaching linguistically significant generalisations.

# Phonological typology and phonological theory



Differences:

*Phonological theory* seeks to show that selected data support a particular theory, e.g. optimality theory (in any of its several forms).

*Phonological typology* seeks (i) to describe the sound system of a language as the common core of phonological knowledge among its speakers and (ii) to trace long-term developments across many generations of speakers.

# English phonology in history and the present



When discussing the phonological typology of English both historical and present-day varieties need to be treated together. There are several reasons for this. As many sociolinguists, above all William Labov, have stressed there is really no difference in principle between forms of language in history and forms in the present. The details will differ but the structural organisation of language, the motivation for change and the factors influencing its rise and course are essentially the same. These facts justify a panchronic approach.

# The Uniformitarian Principle

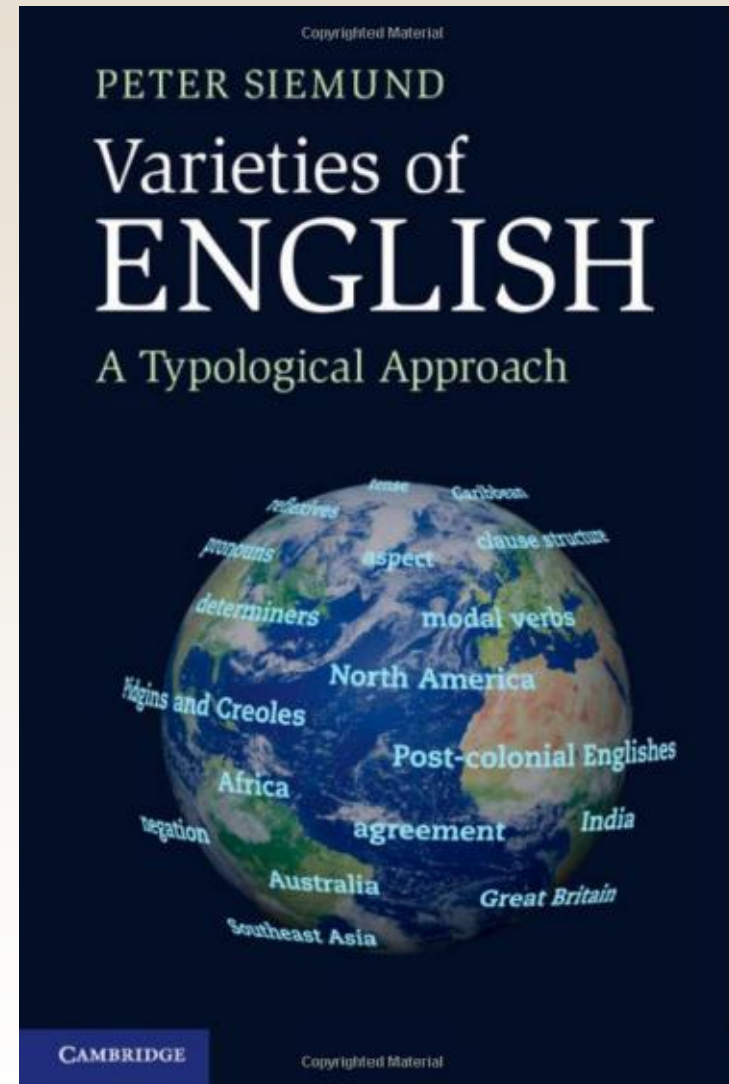
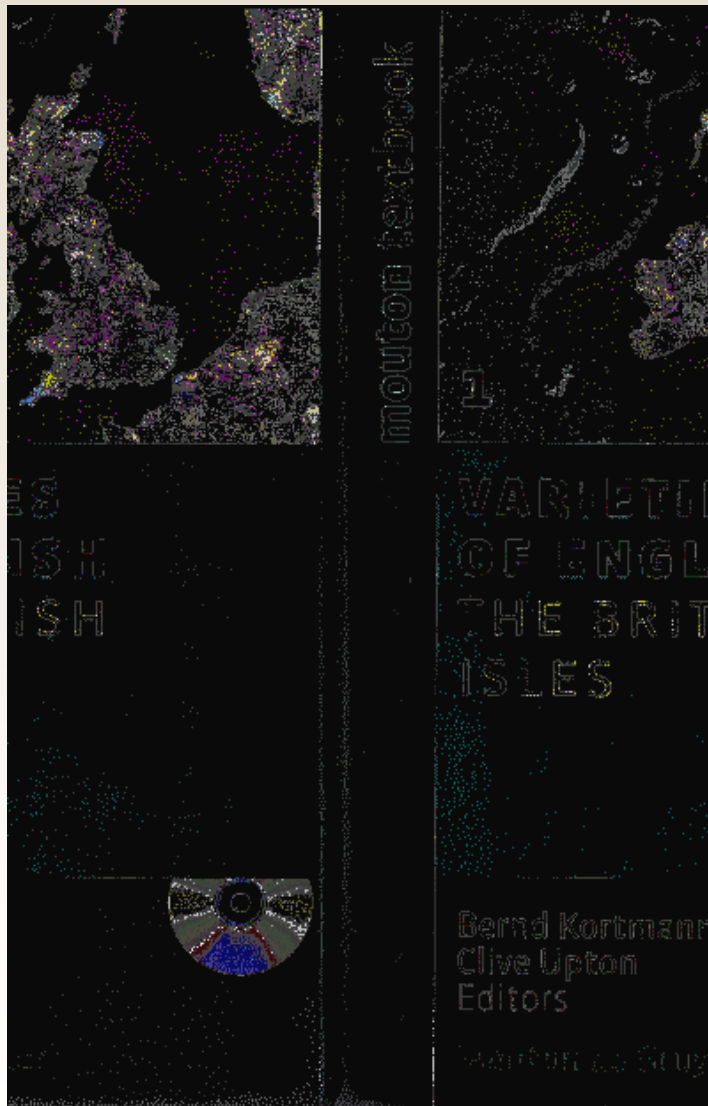
This specifies that internally – in system and structure – and externally – in the interface with society – language has been basically similar since recorded history began so that we can assume that similar forces have operated despite the differences in societies now and in the past.

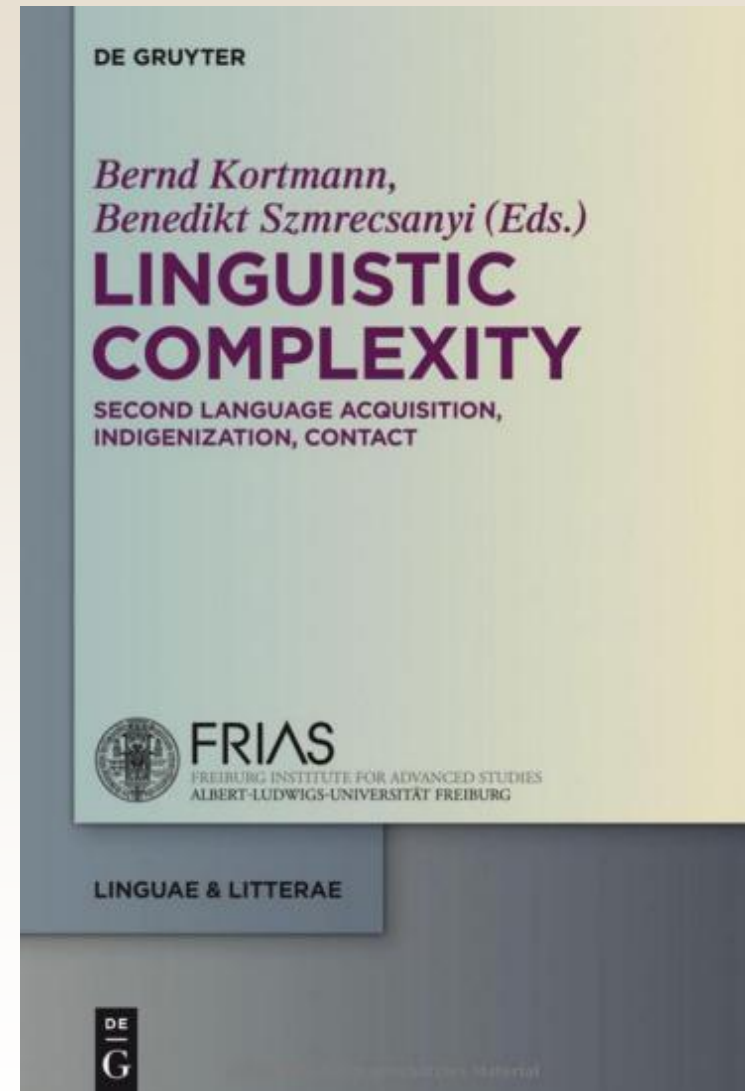
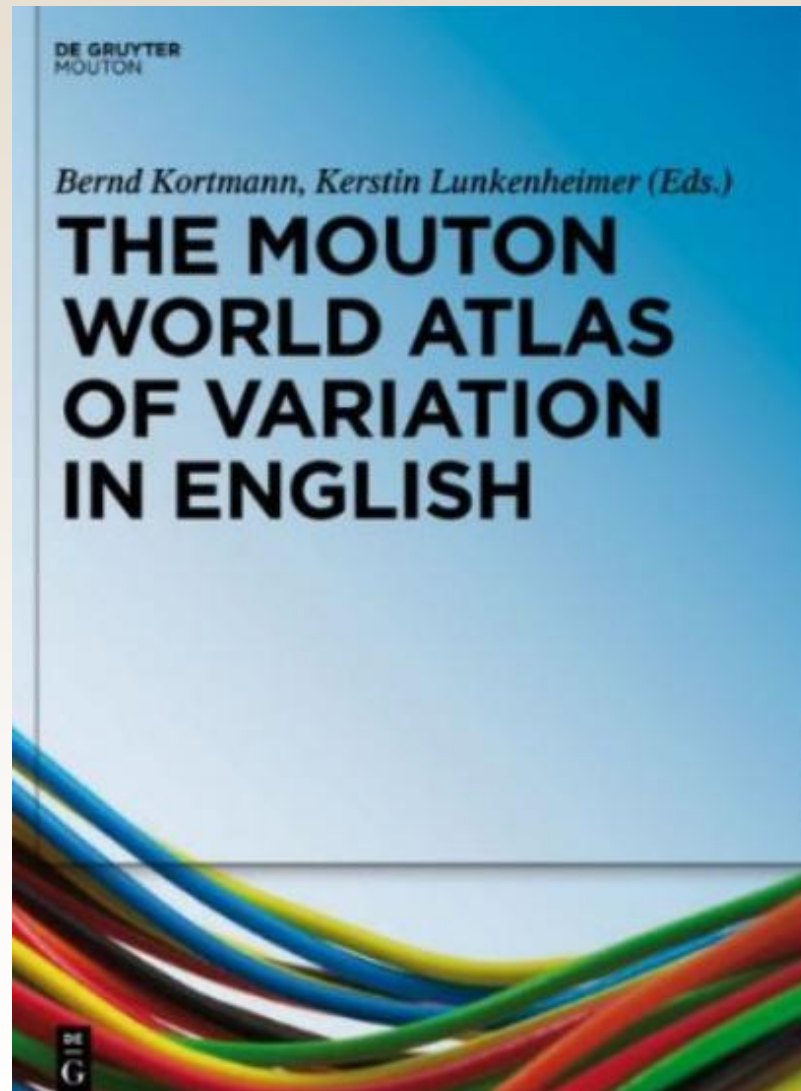




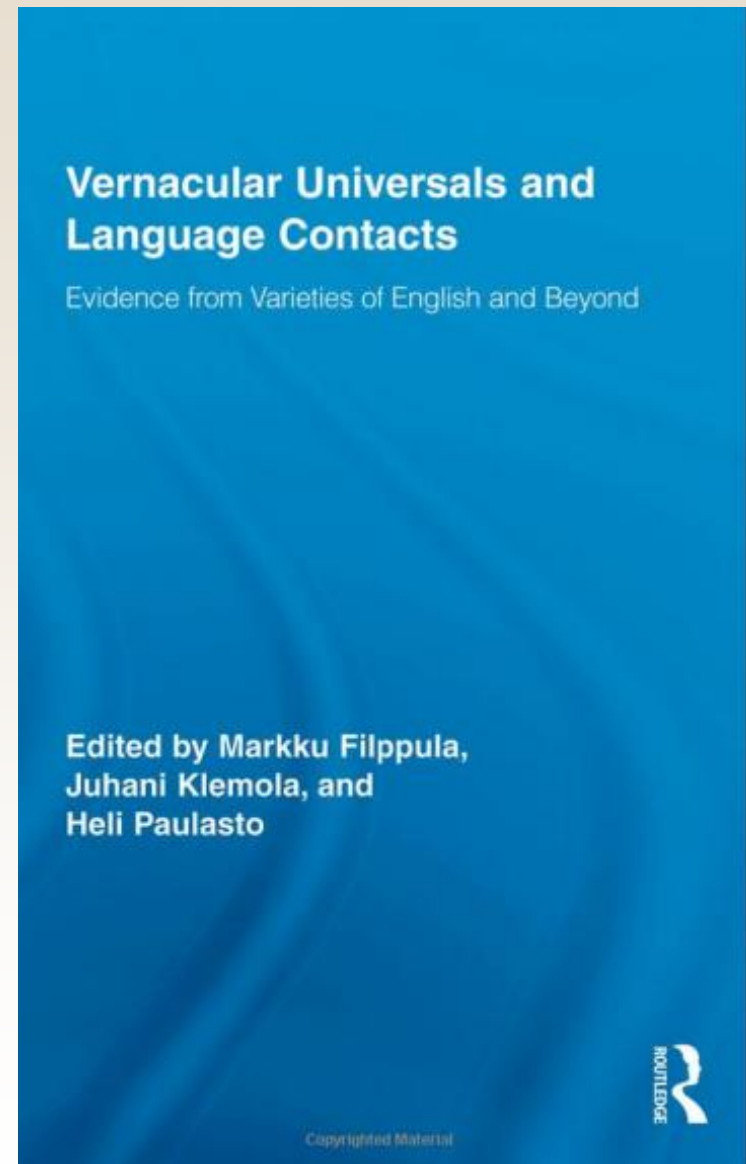
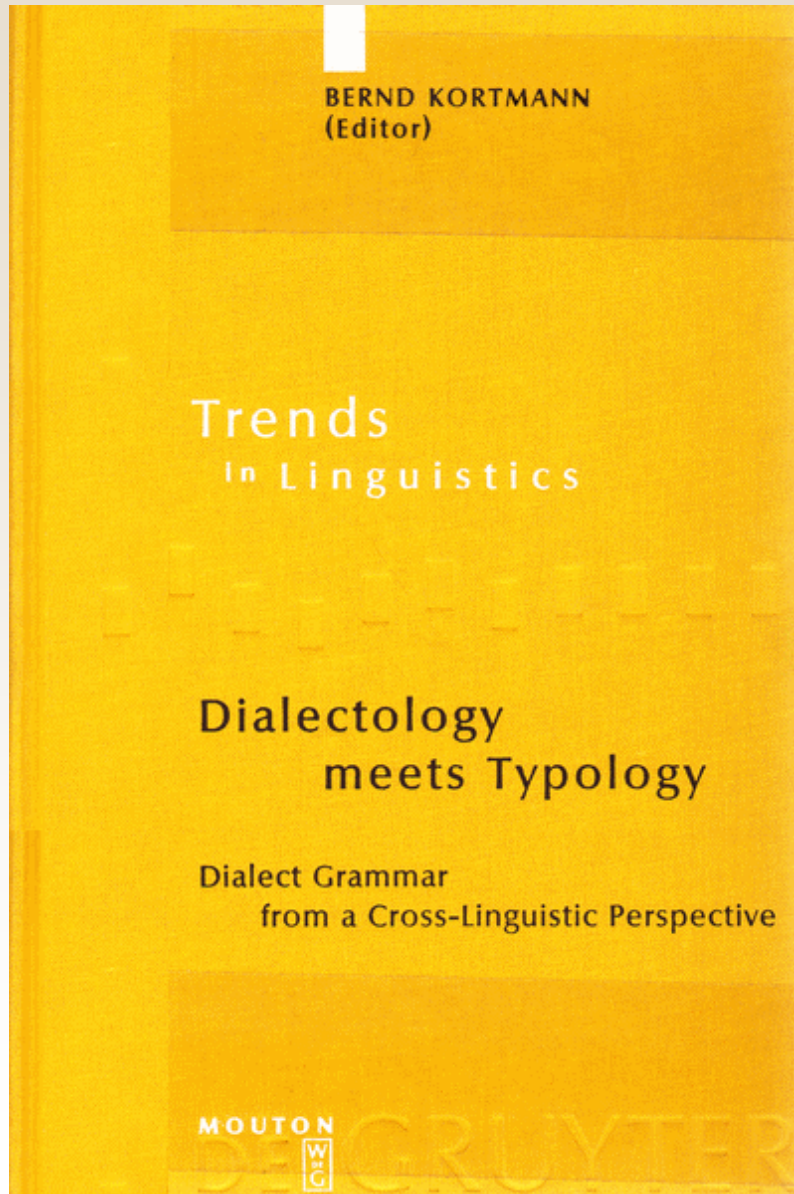
# Recent research trends in varieties of English

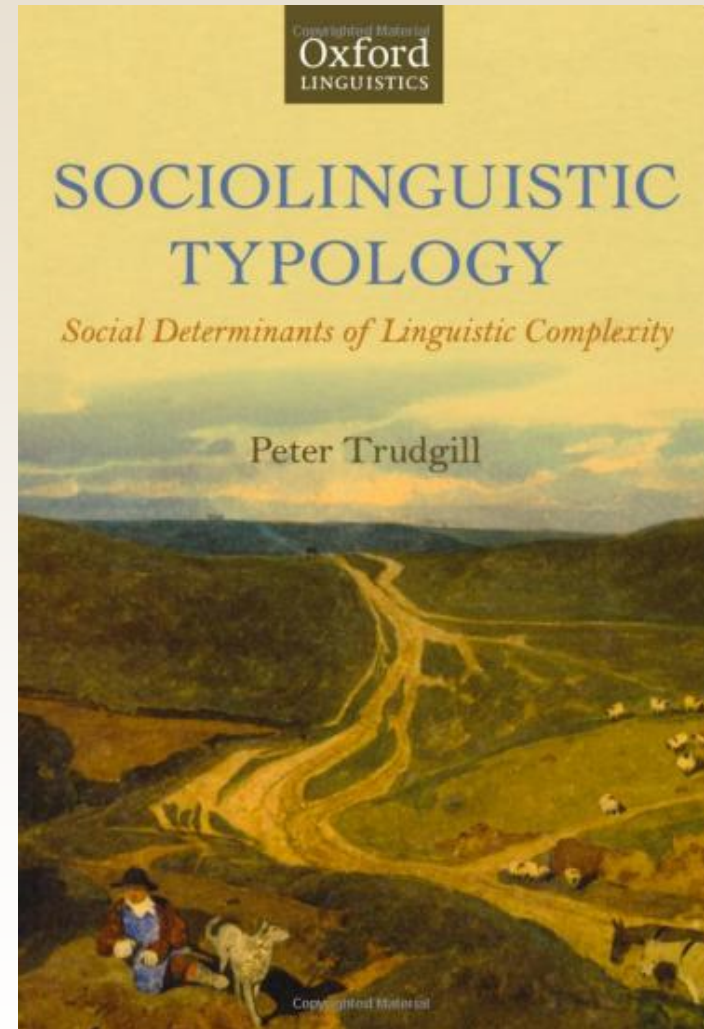
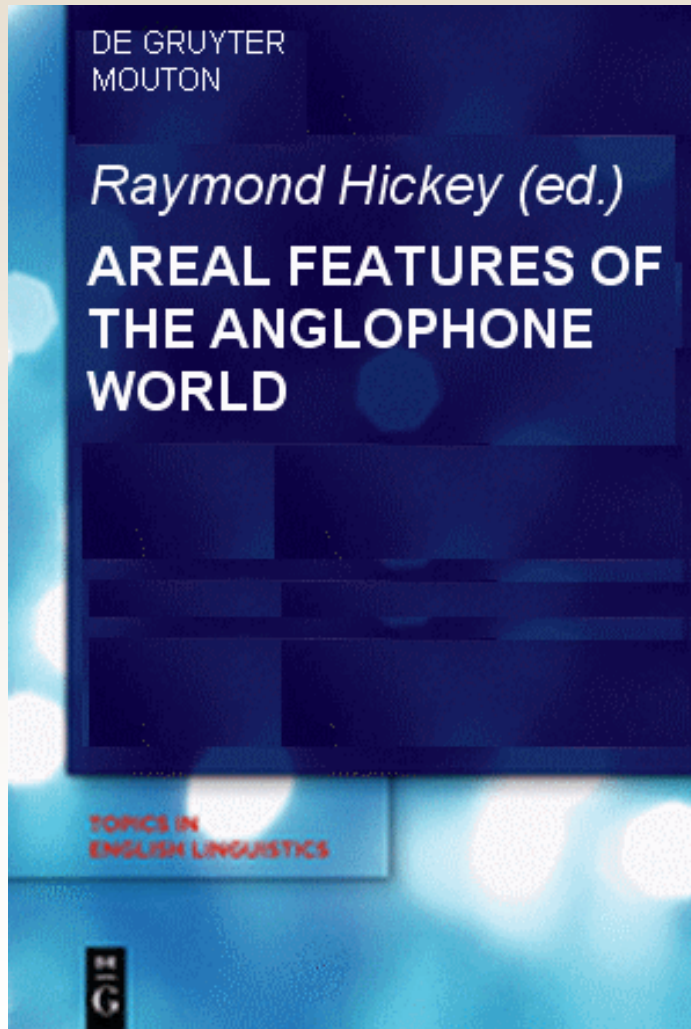














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## Studying the History of English

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*Studying  
the History  
of English*

The current website – *Studying the History of English* – is intended as a resource for linguistics students at various levels who are concerned with the history of the English language. The material in this website is organised into sections, each of which corresponds to a menu on the top row of the desktop. Each menu then leads to a series of sub-menus which contain texts explaining various aspects of the topic of the particular menu. Because of the size of texts, some sub-menus lead to a screen showing a tree on the left and a window on the right, e.g. in the sub-menu on *Vocabulary* under the *Levels* menu. You click on the node of a tree to have the associated item displayed on the right. Click on the last node of a tree, labelled *Exit to desktop*, to return to the initial screen of the website. For texts without an associated tree there is a button at the very top which is labelled *Desktop*. Clicking on this has the same effect.

The information on this website has been deposited here to allow students to access information on the history of English with maximum ease in the hope that this will heighten their interest in and improve their knowledge of the subject. The material here, the texts, the timelines, the galleries, the bibliographies, etc. have been compiled by the author of this website, Raymond Hickey, and if you use this data for your own work — term essays, publications, presentations or whatever — then you are asked to acknowledge this accordingly.

Remember that for phonetic symbols to be properly displayed on your computer you must download the supplied phonetic font. Go to the sub-menu *Technical help* in the current menu.

You can browse through this website by navigating through the menus and sub-menus which can be accessed on the top line of the desktop. Alternatively, you can go to the map for the entire website and choose a section from the list presented there.



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  - [+] Themes
  - [+] Research trends
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## Varieties of English



English is spoken today on all five continents as a result of colonial expansion in the last four centuries or so. The colonial era is now definitely over but its consequences are clearly to be seen in the presence of English as an official and often native language in many of the former colonies. In addition more strongly diverging varieties, which arose in particular socio-political conditions, are also to be found, so-called pidgins which in some cases later developed into creoles. Another legacy of colonialism is where English fulfils the function of a lingua franca. Many countries, like Nigeria, use English as a *lingua franca* (a general means of communication) since there are many different and mutually unintelligible languages. In such situations English fulfils the need for a supraregional means of communication.

English has also come to play a central role as an international language. There are a number of reasons for this, of which the economic status of the United States is certainly one of the most important nowadays. Internal reasons for the international success of English can also be recognised: a little bit of English goes a long way as the grammar is largely analytic in type. It is thus suitable when foreigners do not wish to expend great effort on learning a foreign language.

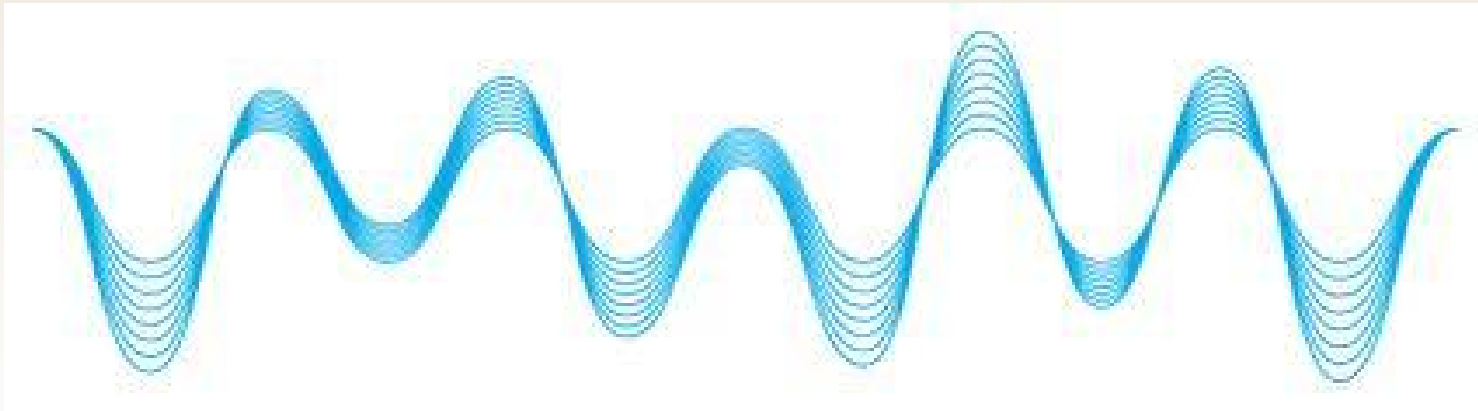
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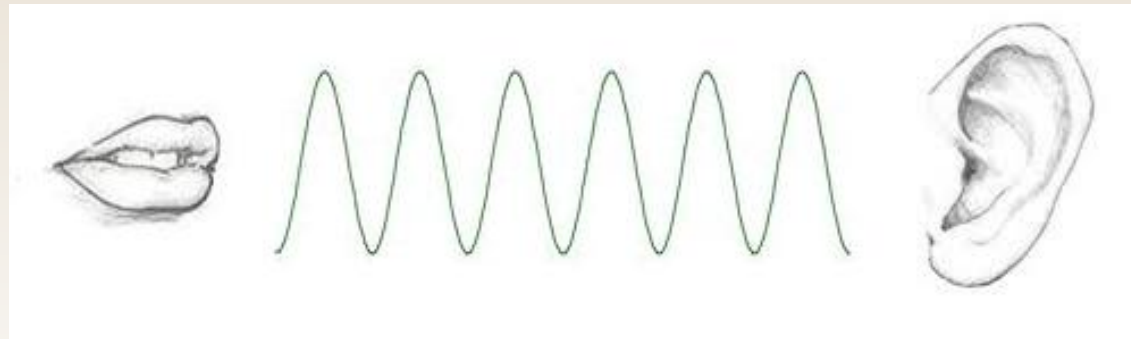
# Principles of Phonological Typology



# The phonetic stream and mental phonological representations

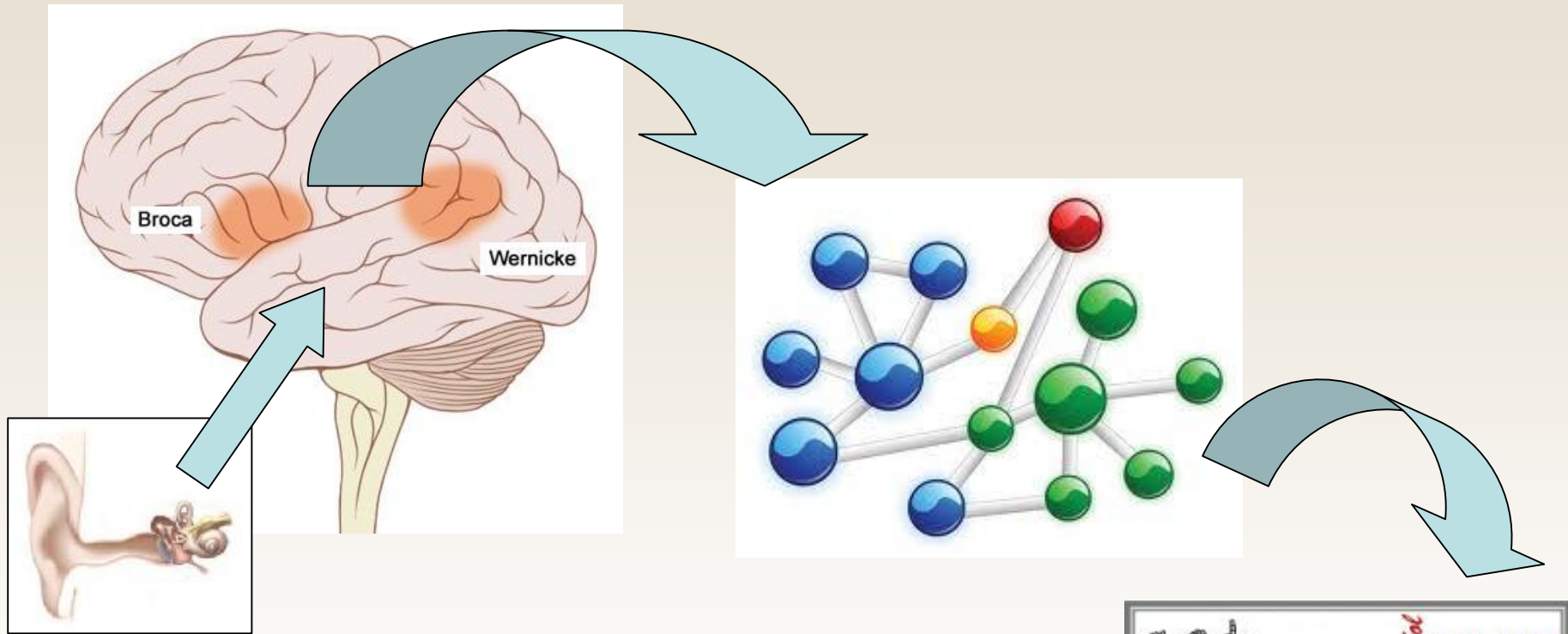


Infants and young children are exposed to a continuous phonetic stream and must make sense of this by working out the systemic structure which underlines this stream of sounds.





# The basis for phonological typology



The mental representation of sounds as phonological units is the basis for all languages. These building blocks (phonemes) are the elements from which to construct units (words).

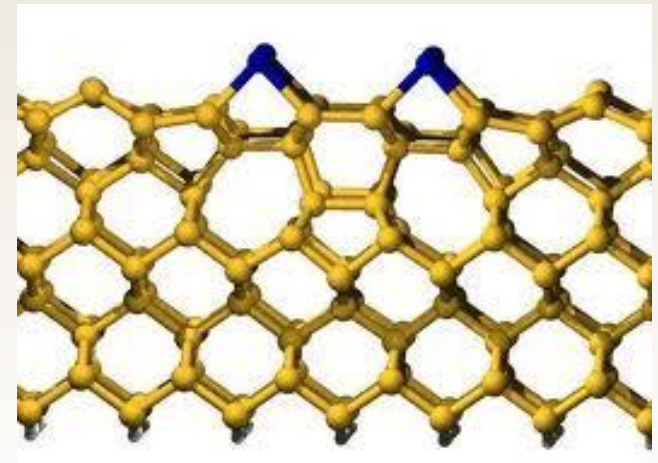




# The basis for phonological typology

Phonological knowledge is generated by children by segmenting the phonetic stream they hear around them, then abstracting the segments they recognise and assigning these to systemic units on a mental level.

This allows children to create new sentences with the sounds which others recognise as part of their native language.



# Overgeneralisation in infancy

◆————◆

To begin with children assume that the structure behind the phonetic stream is maximally simple and only when they continually receive information to the contrary do they revise and refine their assumptions about the sound system of the language they are acquiring and move towards an adult-like system.

# Overgeneralisation in infancy



However, this assumption of simplicity remains as a tendency on a phonetic level of language and change towards simple sounds and syllabic structure can be observed at times.

But language change does not consist of phonetic tendencies getting their way, otherwise all languages would end up in consisting of only one syllable, namely



# Overgeneralisation in infancy



[ba]

# The interplay of phonetics and morphology

◆————◆

Morphology, as an independent level of language, demands clarity of affixes, and so phonetic material in syllable codas of stressed syllables and in all syllable positions in unstressed syllables tends to be maintained.

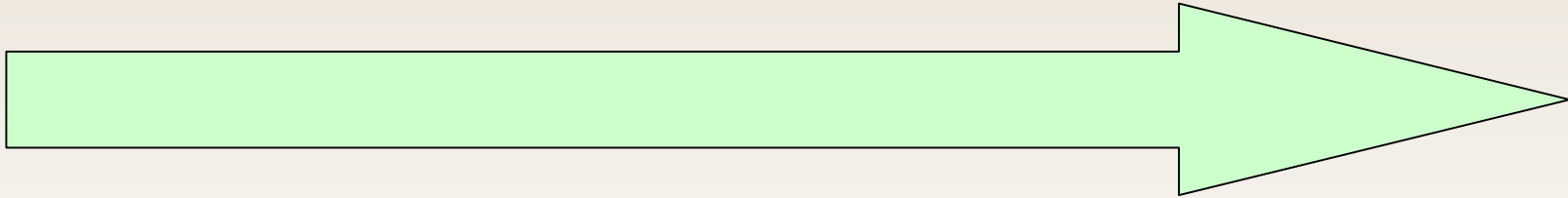
Furthermore, phonetics favours clear signals for word boundaries (serving lexicology/morphology) and this may work against reduction of phonation in syllable codas, see final devoicing in German, Russian, Polish, etc).

These and other factors save languages from being reduced to [ba].

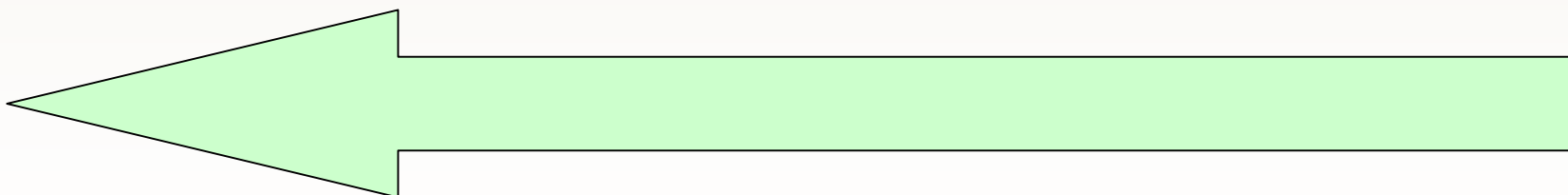
# The interplay of phonetics and morphology



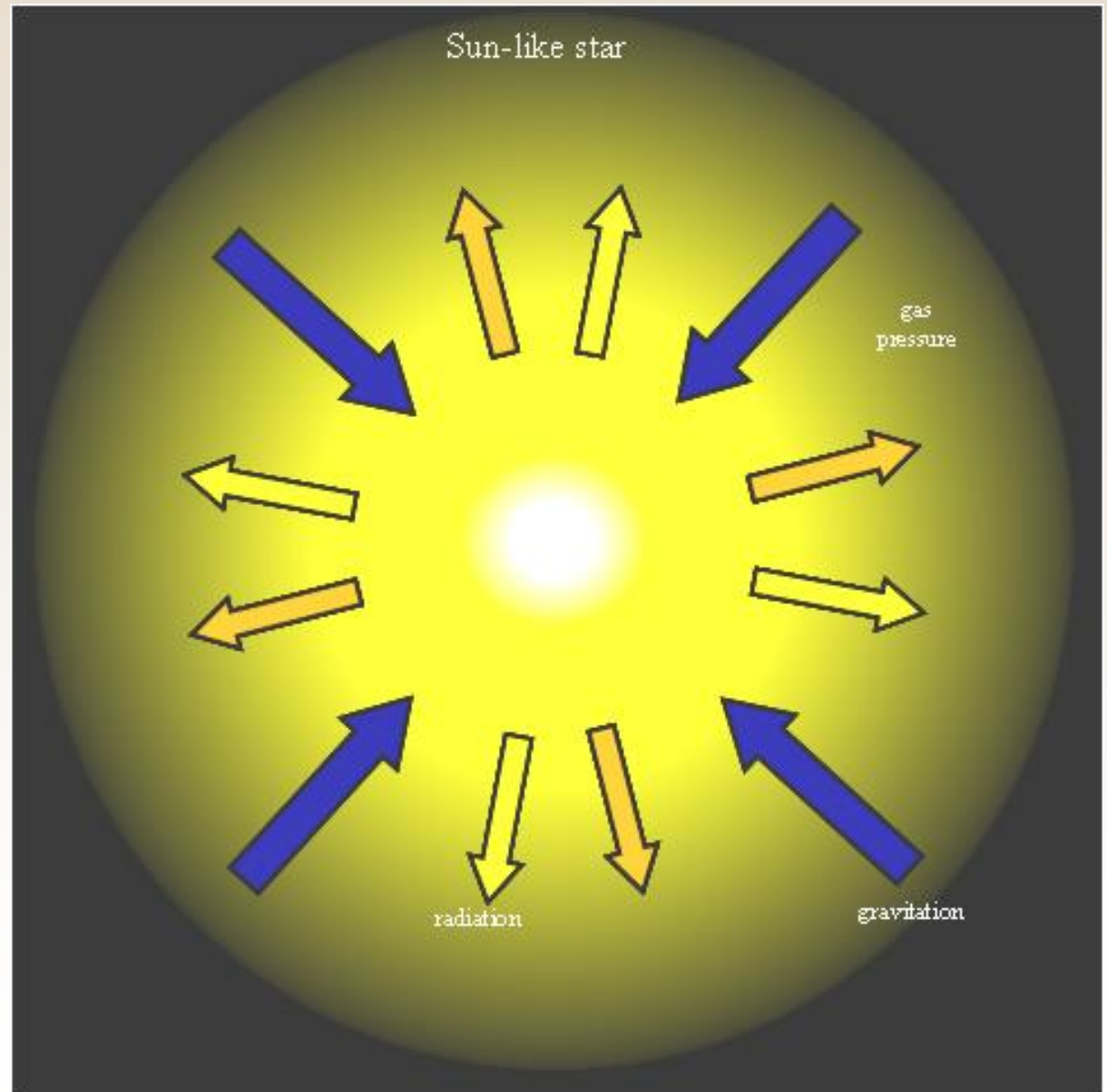
Phonetics (simplify syllable structure)



(retain clarity of affixes/lexical bases) Morphology



Comparison with a star: there are forces pushing out (radiation and gas pressure) and there is a force pushing in (gravity). These are in balance in our Sun, allowing it to shine for billions of years.



# The interplay of phonetics and morphology



The differential weighting of phonetics versus morphology in the languages of the world leads to different outcomes.

Furthermore, there are times when the weighting gets shifted. For instance, with adult language contact in a non-prescriptive environment, morphology is backgrounded and phonetics get the upper hand leading to the phonetic simplification of complex input forms.

Note that if the contact involves young children then the morphology does not get simplified as they master it without even thinking about it.



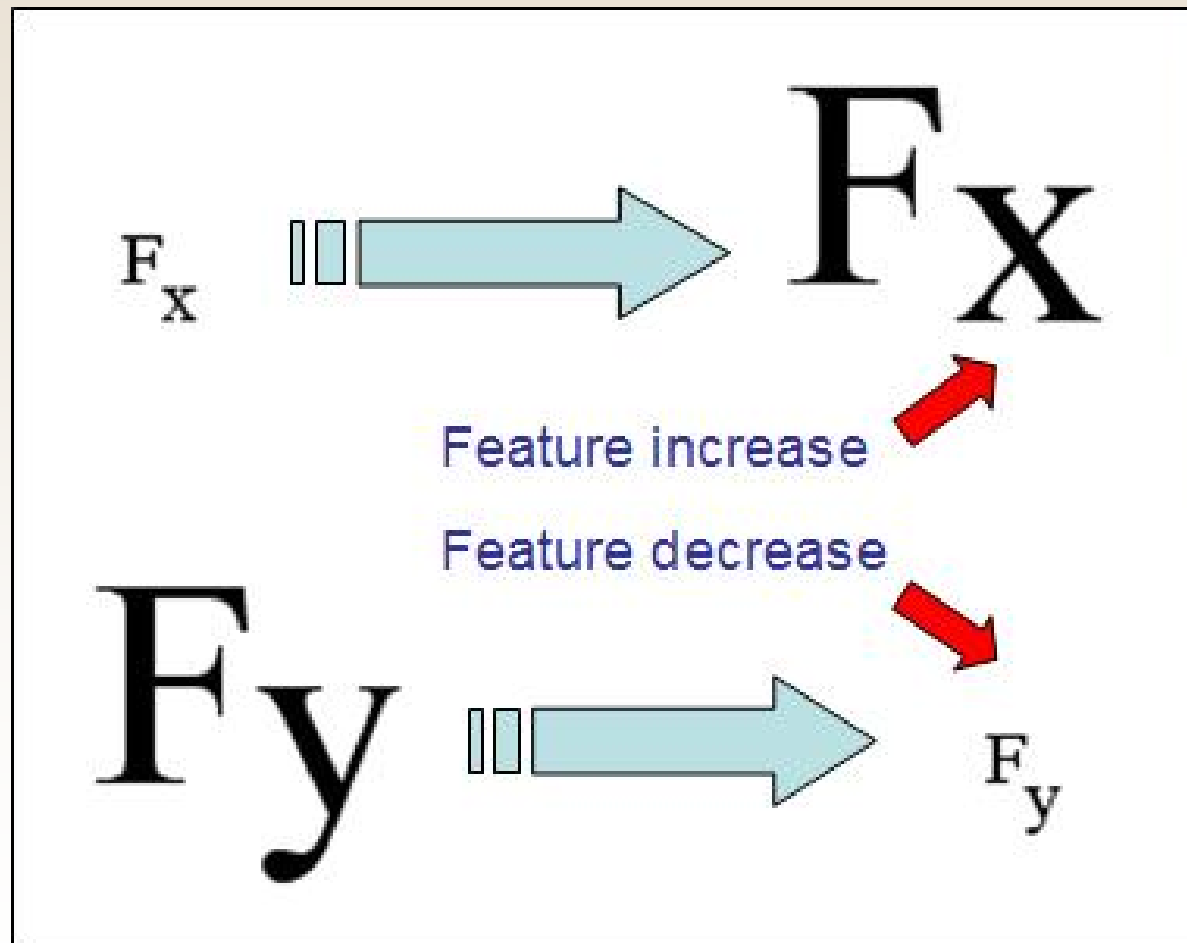


# Handling variation across time





# Handling variation across time



# Handling variation across time

The essential question for historical linguistics is:

How is unidirectional change maintained across several generations? This is what Edward Sapir and linguists after him have called 'drift'.

Back to the children again: they recognise intuitively which features are on the increase and which are on the decrease.

How? Either (i) by noticing that individuals use  $F_x$  more often than  $F_y$  or (ii) by noticing that  $F_x$  occurs more often in the speech of those they take their linguistic cues from, i.e. their peers, not their parents.



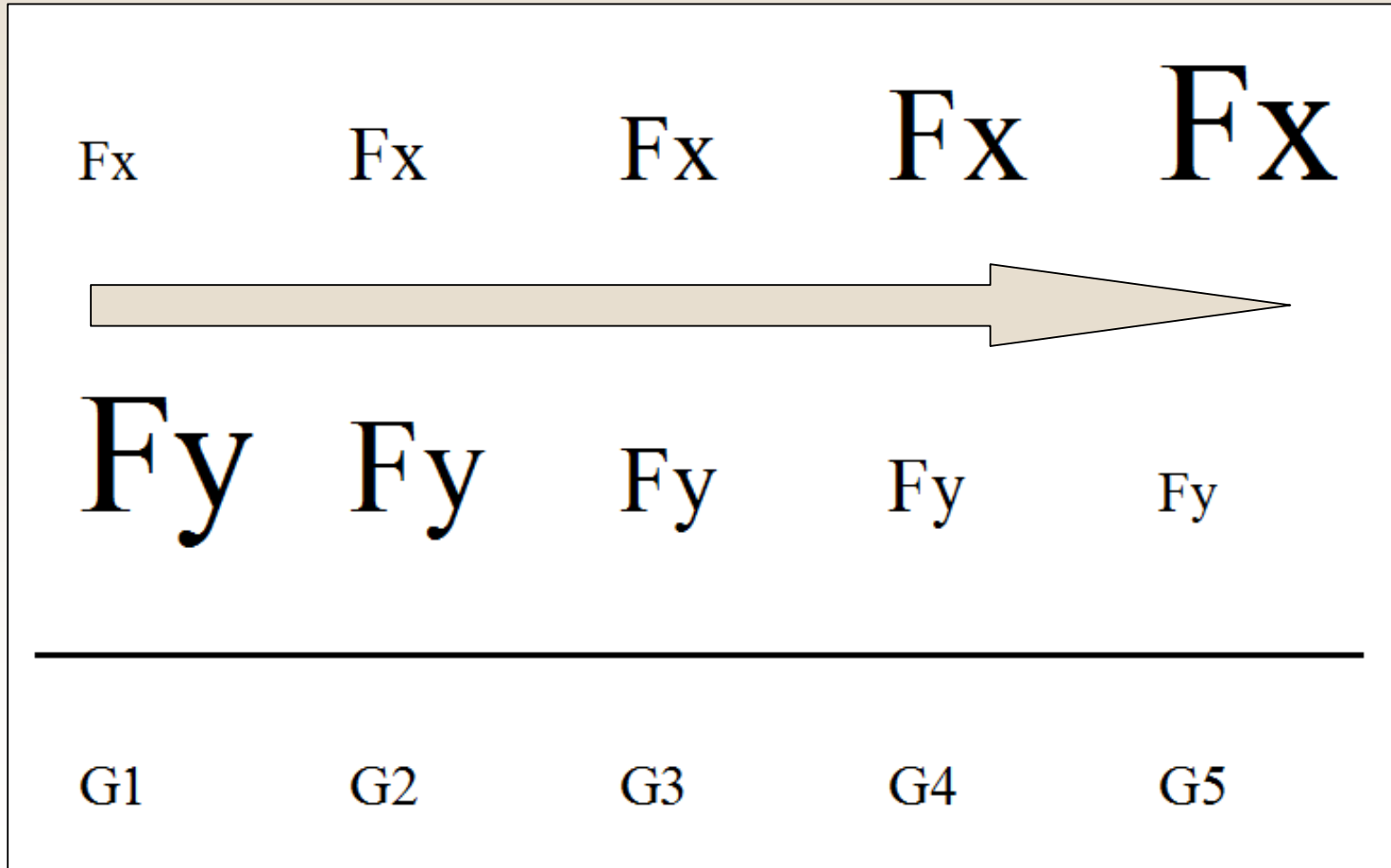
# Handling variation across time



Importantly, each generation of children push the changes they recognise as happening just a little bit further. Over time this means one can recognise a trajectory for language change.

Note furthermore that the demise of a feature  $F_x$  can often be causally linked to the rise of another feature  $F_y$ .

# Handling variation across time



# Handling variation across time

What is the advantage of this view of things? One can explain drift across the generations and does not need recourse to any *deus ex machina* such as reifying language, e.g. 'English did this or that'.



# Variation, symmetry and reanalysis

In the first few years of life children analyse the phonetic stream they hear around them. Variation in this stream can cause the children to interpret sounds differently from the way their parents did this in the preceding generation. The result is *reanalysis*. For instance, at some stage in late Old English the phonetic length of vowels before clusters of sonorant + voiced stop was interpreted as indicating phonologically long vowels and so these vowels were 'reanalysed'.





# Variation, symmetry and reanalysis

The result of this reanalysis is that word like *blind* and *child* are no longer pronounced [blind] and [tʃild] but [blaɪnd] (< [bli:nd]) and [tʃaɪld] (< [tʃi:ld]) respectively.

Such reanalysis is a frequent source of symmetry in sound systems.

The symmetry resulting from reanalysis is particularly striking in inflectional morphology leading to paradigmatic regularity.



# Reconstruction

How can one reconstruct phonology?

One can look at primary texts which attempt to represent pronunciation through a system of their own, e.g. the *Orrmulum*.

One can examine corpus texts for misspellings, e.g. *write* for *right* in late Middle English which would indicate that the fricative after the nucleus vowel had been lost, i.e. *right* had become /ri:t/ (from and earlier /rixt/).



# Reconstruction

And one can consult metalinguistic texts such as orthoepic and prescriptive commentaries on the pronunciation of English through the centuries (from the late 16th century to the present-day).

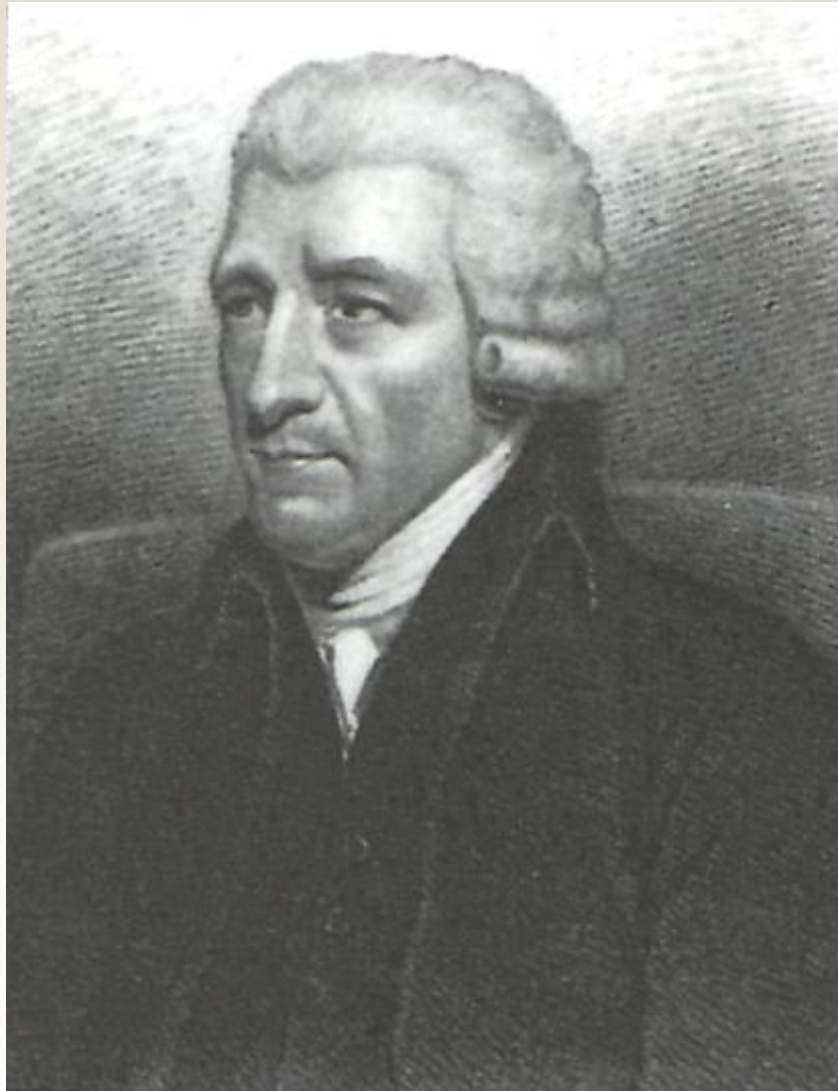
To do this one has to concern oneself with the manner in which authors in previous centuries talked about pronunciation and sound systems, but usually their statements can be seen to be quite reliable and of value for historical phonological research.





# Prescriptivism and language change





**Walker, John** (1732-1807) A Londoner and prescriptive author of the late 18th century, best known for his *Critical pronouncing dictionary* (1791) which enjoyed great popularity in its day.

A CRITICAL  
PRONOUNCING DICTIONARY,  
AND EXPOSITOR OF  
THE ENGLISH LANGUAGE:

IN WHICH, NOT ONLY THE MEANING OF EVERY WORD IS CLEARLY EXPLAINED,  
AND THE SOUND OF EVERY SYLLABLE DISTINCTLY SHOWN,  
BUT, WHERE WORDS ARE SUBJECT TO DIFFERENT PRONUNCIATIONS,  
THE AUTHORITIES OF OUR BEST PRONOUNCING DICTIONARIES ARE FULLY EXHIBITED,  
THE REASONS FOR EACH ARE AT LARGE DISPLAYED, AND THE  
PREFERABLE PRONUNCIATION IS POINTED OUT.

*To which are prefixed,*

PRINCIPLES OF ENGLISH PRONUNCIATION:

IN WHICH THE SOUNDS OF LETTERS, SYLLABLES, AND WORDS, ARE CRITICALLY  
INVESTIGATED, AND SYSTEMATICALLY ARRANGED;  
THE INFLUENCE OF THE GREEK AND LATIN ACCENT AND QUANTITY, ON THE ACCENT AND QUANTITY  
OF THE ENGLISH, IS THOROUGHLY EXAMINED, AND CLEARLY DEFINED;  
AND THE ANALOGIES OF THE LANGUAGE ARE SO FULLY SHOWN AS TO LAY THE FOUNDATION  
OF A CONSISTENT AND RATIONAL PRONUNCIATION.

LIKEWISE,

*Rules to be observed by the Natives of Scotland, Ireland, and London,  
for avoiding their respective peculiarities; and*

DIRECTIONS TO FOREIGNERS, FOR ACQUIRING A KNOWLEDGE OF THE USE OF THIS DICTIONARY.

The whole interspersed with

OBSERVATIONS, ETYMOLOGICAL, CRITICAL, AND GRAMMATICAL.

BY JOHN WALKER,

AUTHOR OF ELEMENTS OF ELOCUTION, RHYMING DICTIONARY, &c. &c.

Quare, si fieri potest, et verba omnia, et vox, hujus almuomum urbis oluat: ut oratio Romana placid violentur, non civitate dentata.— Quint.

THE FIFTEENTH EDITION.

LONDON:

STEREOTYPED AND PRINTED BY A. WILSON, CAMDEN TOWN;  
FOR T. CADEL AND W. DAVIES; G. WILKIE; LONGMAN, HURST, REES, ORME, AND BROWN;  
B. AND R. CROSBY; G. AND S. ROBINSON; CRADOCK AND JOY; SHERWOOD,  
NEELY, AND JONES; AND WALKER, EDWARDS, AND REYNOLDS.

1815.

***A Critical Pronouncing Dictionary,  
and Expositor of the English Language***

*in which not only the meaning of every word is clearly explained, and the sound of every syllable distinctly shown, but, where words are subject to different pronunciations, the authorities of our best pronouncing dictionaries are fully exhibited, the reasons for each are at large displayed and the preferable pronunciation is pointed out.*

*To which are prefixed,*

**PRINCIPLES OF ENGLISH PRONUNCIATION:**

*in which the sounds of letters, syllables, and words, are critically investigated, and systematically arranged; The influence of the Greek and Latin accent and quantity, on the accent and quantity of English, is thoroughly examined, and clearly defined, and the analogies of the language are so fully shown as to lay the foundation of a consistent and rational pronunciation*

*likewise,*

*Rules to be observed by the Natives of Scotland, Ireland, and London, for avoiding their respective peculiarities; and*

**DIRECTIONS TO FOREIGNERS, FOR ACQUIRING A KNOWLEDGE OF THE USE OF THIS DICTIONARY.**

Terms in Walker's *Dictionary* (left column) and their present-day equivalents (right column)

sink	delete
sharp	voiceless
flat	voiced
mute	stop
hissing	fricative
lisping	interdental fricative
guttural	velar
slender	raised (of vowels)



IMBECILE, <sup>2</sup>im-bēs'sīl, or <sup>1</sup>im-bē-sēel'. a.

Weak, feeble, wanting strength of either mind or body.

☞ Dr. Johnson, Dr. Ash, Dr. Kenrick, and Entick, accent this word on the second syllable, as in the Latin *imbecilis*; but Mr. Scott and Mr. Sheridan on the last, as in the French *imbécille*. The latter is, in my opinion, the more fashionable, but the former more analogical. We have too many of these French founding words; and if the number cannot be diminished, they should, at least, not be suffered to increase. (112).

This word, says Dr. Johnson, is corruptly written *embezzle*. This corruption, however, is too well established to be altered: and, as it is appropriated to a particular species of deficiency, the corruption is less to be regretted.

/im'be:sil/

versus

/imbe'si:l/

## HORIZON, hŏ-rî'zŏn. f.

The line that terminates the view.

☞ This word was, till of late years, universally pronounced, in prose, with the accent on the first syllable; and that this is most agreeable to English analogy cannot be doubted. But Poets have as constantly placed the accent on the second syllable, because this syllable has the accent in the Greek and Latin word; and this accentuation is now become so general as to render the former pronunciation vulgar.

*/ˈhɒrɪzən/* versus */həˈraɪzən/*



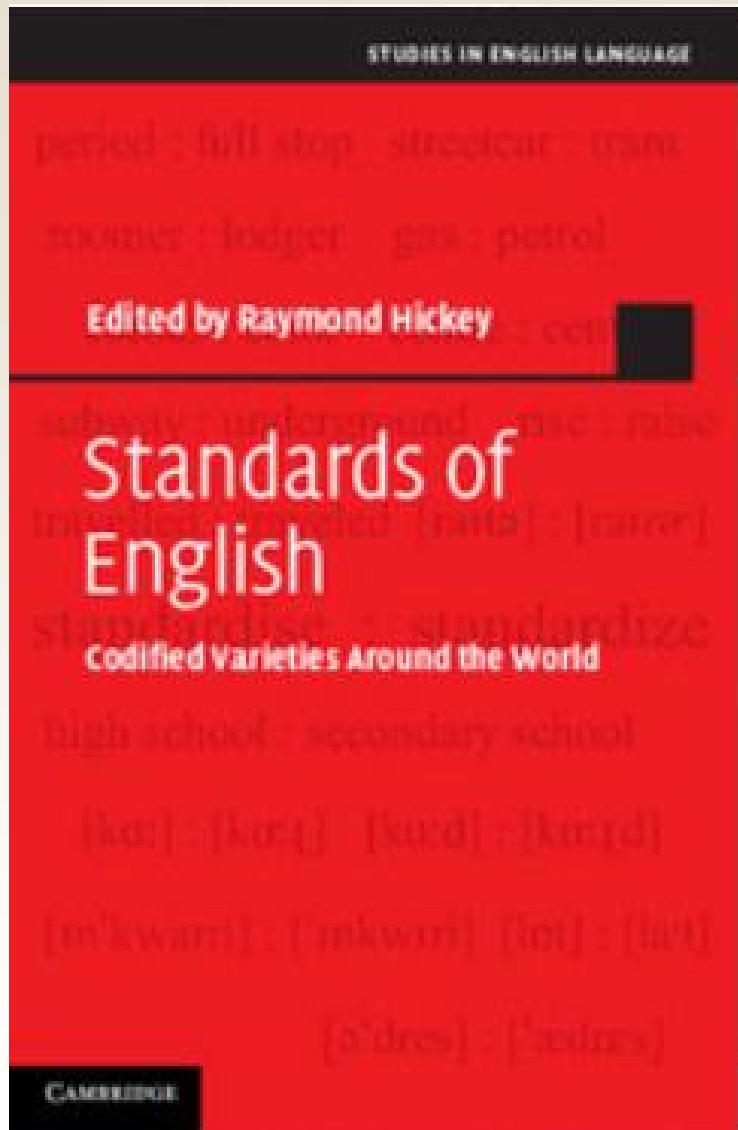
# Standardisation effects



# Standardisation effects

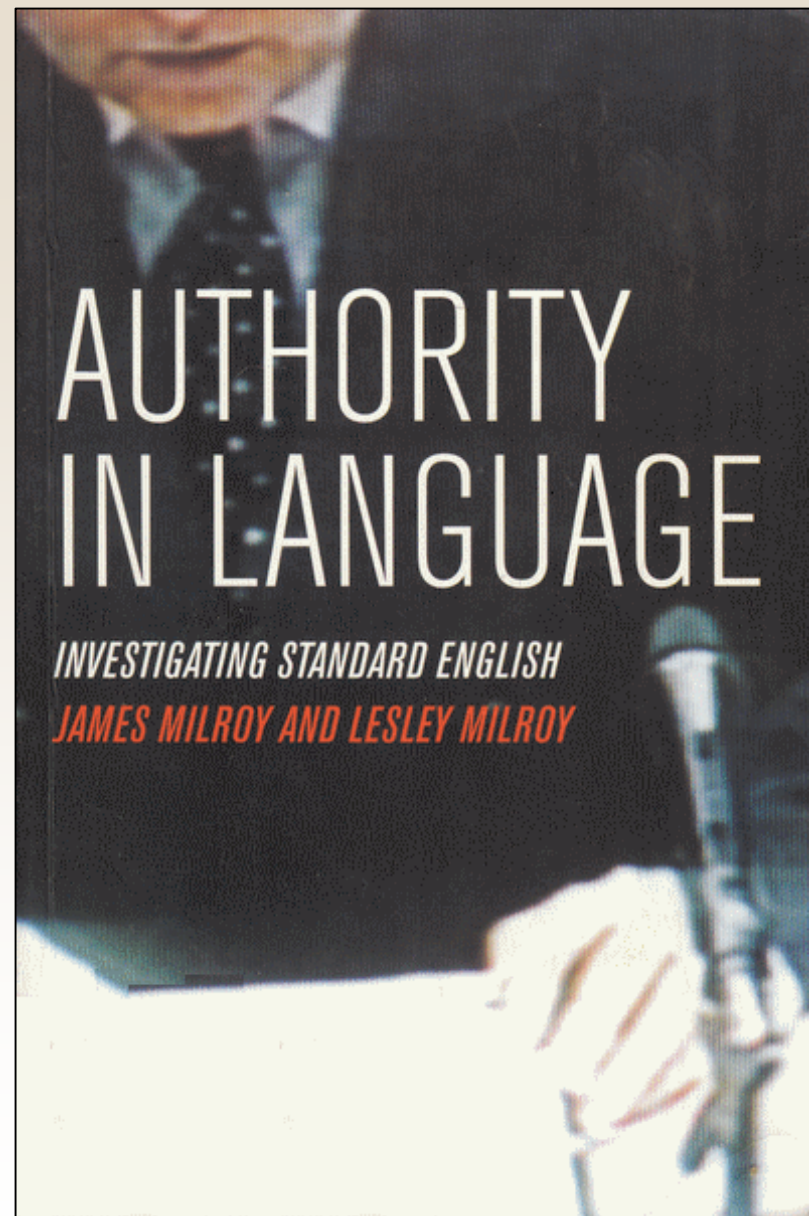
Part of the prescriptivism which goes with maintaining the standards of a language is the insistence on morphology. Endings are kept in standards. Just think of the loss of final /-s/ in southern Spanish or colloquial Greek or the loss of final /-n/ in so many dialects of German. These endings are scrupulously maintained in the standards of these languages.

So standardisation can have a retarding effect on language change and certainly works against natural phonetic tendencies.





A critical look at the way in which notions of standard language are used manipulatively and to exclude others.





# Motivation for change





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Language change can basically be assigned to one of two types:

1) the change is caused by structural realignments through reanalysis, mostly during first language acquisition — this is *internally motivated change*.

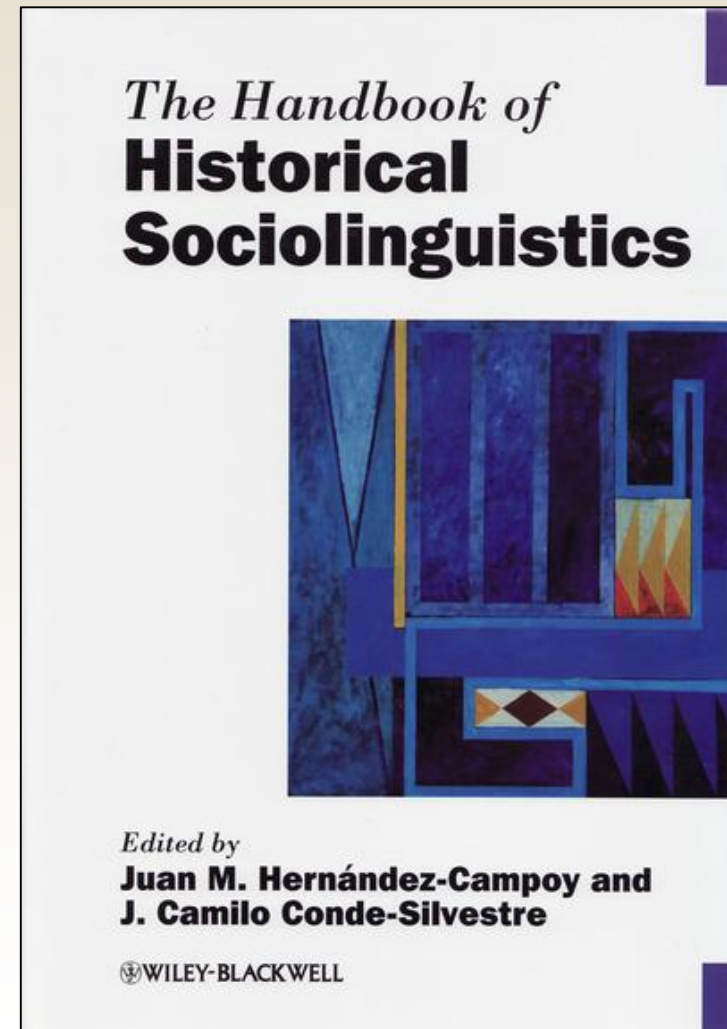
2) The change results from the linguistic behaviour of teenage and adult speakers in their community, — this is *externally motivated change*.

# Motivation for change

- 1) Young children start by making maximally generally assumptions about the language they are acquiring and refine their picture of it as they get older. If they reanalyse some of the input during acquisition they this leads to regularity, hence reanalysis is symmetry-enhancing.
- 2) Teenagers and young adults may introduce very slight variations into their speech which, seen cumulatively, can to shifts in the system, hence variation in symmetry-breaking.

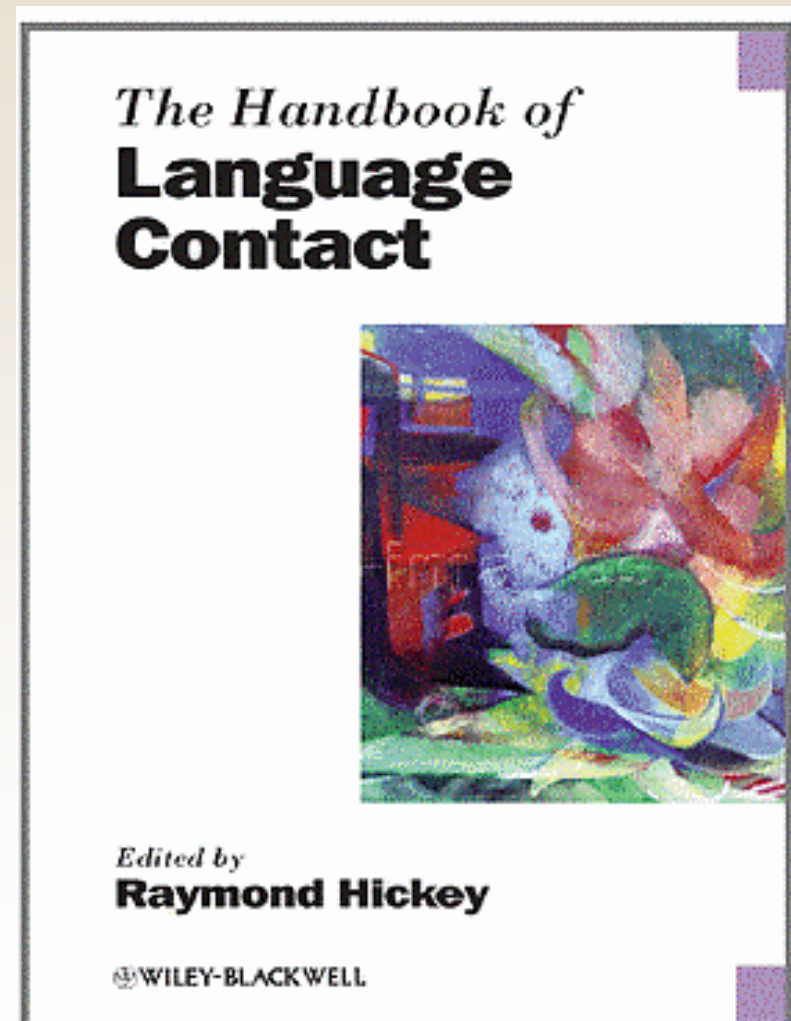
# Motivation for change

The interplay of internal and external factors is a key concern of historical linguistics and had been the focus of much research in recent years as shown in major publications like the recent handbook of historical sociolinguistics.



# Motivation for change

Research into language contact has been on the increase in recent years with a re-valorisation of this possible source for language change. It is one possible sources among many others and should not be over-estimated or view as the sole reason for change.



Thankyou for your attention.

Any questions?

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