

## Lecture 8: The 19th Century Philology

### Our Objectives:

1. Get a sense of the socio-economic environment in 19<sup>th</sup> century Europe
2. Learn about
  - a. the general scientific developments during the 19<sup>th</sup> century (particularly Darwin's Theory of Evolution), and
  - b. How the atmosphere of the day influenced linguistics
  - c. Who did what on the linguistic scene:
    - i. Jakob Grimm (1785-1863)
    - ii. Karl Verner (1846-1896)
    - iii. The Neogrammarians (last quarter of the 19<sup>th</sup> century)
    - iv. Wilhelm von Humboldt (1767-1835).

Having traced the history of European linguistic thought from Ancient Greece through to the end of Renaissance in the 18<sup>th</sup> century AD, we remember that

- The Middle Ages brought about a general cultural decline caused by socio-economic and political fragmentation and the dominance of the Roman Catholic Church (the only highlight of the period were the *modistae* grammarians).
- During the Renaissance, despite an awakening interest in the growing *national* languages (i.e., **Dante's *De vulgari eloquentia***), attention was focused more on antiquity and the classic languages (Latin and Greek)
- As education became more widespread and accessible, **prescriptive** grammar based on *Priscian* principles was used to teach the norms of literary language in Europe and its colonies around the world right up to World War II. Only a few insignificant modifications, made to accommodate the knowledge of new languages brought some minor adjustments to the serious study of grammar.

Until quite recently, then, school grammar had little to do with the studies pursued by professional linguists; for most people, **prescriptive grammar** has been synonymous with “grammar.”

### Modern linguistics

We also remember that **1786** is commonly regarded to be the birth date of modern linguistics, because it was then that **Sir William Jones** observed in his presentation to the Royal Asiatic Society in Calcutta that Sanskrit, Greek, Latin, Celtic and Germanic all had striking structural similarities.

He claimed that the commonalities between Latin, Greek, and Sanskrit were so numerous that ‘...no philologist could examine all three, without believing them to have sprung from some common source, which, perhaps, no longer exists.’

‘The Sanskrit language,’ he wrote, ‘whatever be its antiquity, is of a wonderful structure; more perfect than the Greek, more copious than the Latin, and more exquisitely refined than either, yet bearing to both of them a stronger affinity, both in the roots of verbs, and in the forms of grammar, than could possibly have been produced by accident.’

Jones suggested that the similarities between the three languages could only be explained by common origin, i.e., that they had descended from a common mother tongue, no longer spoken.

Sir William Jones significantly altered the perceptions that people had about the nature of language relationships. He emphasized that it was similarities in the *structure* of the Indo-European languages, rather than individual similarities between words that were important in determining language relationships. This gave a whole new dimension to subsequent linguistic enquiry, as scholars started looking for grammatical similarities between languages to determine whether or not they were related. Lexical similarity, they realized, could sometimes be misleading, as *chance* and *borrowing* could result in languages having similar words without a close genetic link between them.

Consider these, for example:

**Chance:**

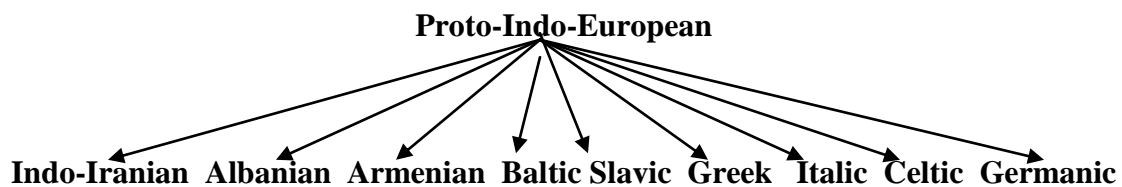
English *bad* : Persian *bad*  
 English *who* : Karabagh *hu* ('who')  
 English *hair* : Armenian *her*

**Borrowing:** Norman vocabulary in English: *mutton, beef, veal*, etc.

Jones went on to suggest that a number of different languages from very different geographical areas must have had some common ancestor. No written records existed of the 'Grandmother' language, so, he concluded, its description could only be hypothesized on the basis of similar features in its descendants.

Investigation of genetic links between known languages set the tone for linguistic inquiry for the next hundred years. Everybody was busy writing comparative grammars which

1. Compared the various linguistic forms found in the members of the Indo-European language family, and
2. Attempted to re-create their hypothetical ancestor, **Proto-Indo-European**, from which they all were descended:



Working from a biblical perspective, some scholars believed that all human languages were descended from the language of Adam and Eve, a language called the Adamic language. Many of these scholars believed that the Hebrew language was, in fact, the same as the Adamic language.

### Development of the comparative method

The most outstanding achievement of linguistics in the 19th century, though, as we have already stated, was the development of the **comparative method**, which comprised a set

of principles whereby languages could be systematically compared with respect to their sound systems, grammatical structure, and vocabulary and shown to be “genealogically” related.

As French, Italian, Portuguese, Romanian, Spanish, and the other Romance languages had evolved from Latin, so Latin, Greek, and Sanskrit as well as the Celtic, Germanic, and Slavic languages and many other languages of Europe and Asia had evolved from some earlier language, now called Indo-European or Proto-Indo-European.

It all started with Sir William Jones’ hypothesis that Latin, Greek and Sanskrit must have “sprung from some common source, which perhaps no longer exists.” By that time, a number of texts and glossaries of the older Germanic languages (Gothic, Old High German, and Old Norse) had been published, and Jones realized that Germanic as well as Old Persian and perhaps Celtic had evolved from the same “common source.”

**Rasmus Rask (1787-1832)**, a Danish linguist who investigated the history of the Icelandic language on the basis of its grammatical similarities to other Germanic languages, and largely ignored the lexicon. Rask argued, however, that while individual lexical similarities did not provide conclusive evidence of linguistic relationship, *repeated occurrences of sound correspondences between words could not be due to chance* and were thus valid evidence of genetic relationship.

The next important step came in **1822**, when the German scholar **Jacob Grimm**, following **Rasmus Rask** (whose work, being written in Danish, was less accessible to most European scholars), pointed out that there were a number of systematic correspondences between the sounds of Germanic and the sounds of Greek, Latin, and Sanskrit in related words (cognates). Grimm noted, for example, that where Gothic (the oldest surviving Germanic language) had an **f**, Latin, Greek, and Sanskrit frequently had a **p** (e.g., Gothic *fotus*, Latin *pedis*, Greek *podós*, Sanskrit *padás*, all meaning “*foot*”); when Gothic had a **p**, the non-Germanic languages had a **b**; when Gothic had a **b**, the non-Germanic languages had what Grimm called an “aspirate” (Latin **f**, Greek **ph**, Sanskrit **bh**). In order to account for these correspondences he postulated a cyclical “**soundshift**” (**Lautverschiebung**) in the prehistory of Germanic, in which the original “aspirates” became voiced unaspirated stops (**bh** became **b**, etc.), the original voiced unaspirated stops became voiceless (**b** became **p**, etc.), and the original voiceless (unaspirated) stops became “aspirates” (**p** became **f**).

\*Grimm's term, “aspirate,” covered such phonetically distinct categories as aspirated stops (bh, ph), produced with an accompanying audible puff of breath, and fricatives (f), produced with audible friction as a result of incomplete closure in the vocal tract.

Grimm’s Law (Consonantal Shift), however, had some exceptions and inconsistencies. Grimm himself wrote, ‘...the sound shifts succeed in the main, but work out completely only in individual words, while others remain unchanged.’

**Karl Verner (1846-1896)** – a Danish philologist whose fame rests on **Verner’s Law**, a linguistic formulation showing that certain consonantal alternations in Germanic

languages are the result of patterns of alternation in the position of word accent in the parent language. **Verner's Law**, formulated in 1875, explained away some of the apparently irregular forms in Grimm's statement of sound correspondences in the Indo-European languages. He showed, for example, that the correspondences of **t = d** and **t = Θ** were in complementary distribution, with one correspondence showing up when the following vowel was stressed in Proto-Indo-European, and the other – when the vowel was unstressed.

#### **Lx reflected the general direction of 19<sup>th</sup> century thought:**

The work of all these linguists, their concern with reconstructing PIE, and making hypotheses about the way it split into the various daughter languages, reflected the general direction of 19<sup>th</sup> century thought. In 1859, **Darwin** published his famous *Origin of Species*, putting forward the theory of evolution. Darwin's theory strongly influenced the way linguists viewed languages. They began to see them as biological organisms, which had family trees and ancestors. They postulated that if two or more languages had many **similar words** with **similar meanings**, then they had evolved from the same parent language. This hypothesis was based on the assumption that languages change in **regular, systematic** ways. Differences between related languages were due to **regular sound changes**, which could become evident through careful study.

The '**Young Grammarians**' ('Die Junggrammatiker'), a group of German scholars, achieved a breakthrough in the last quarter of the 19<sup>th</sup> century, when they claimed that

- language change was '**regular**'
- phonetic laws operated **without exception** in a language, and that
- the only conditioning factors that could determine the course of sound change were **phonetic factors**.

In other words, they argued that semantic or grammatical factors could not be involved in the conditioning of sound changes: it would be impossible, for example, for a particular change to affect the words referring to trees, but not words referring to birds, or for a change to occur in nouns, and not in verbs, etc. The only factors which could condition a sound change, they argued, were phonetic factors, such as the preceding and following sounds, the position of the sound in the word, and so on. If, they argued, in any word of a given dialect, one sound changes into another, the change would also affect all other occurrences of the same sound in similar phonetic environments. For example, in Old English the word *chin* was pronounced [kin] (spelt *cinn*). This change from /k/ to /č/ affected all other /k/ sounds which occurred at the beginning of a word before a high front vowel (*i* or *e*). So we also get *chicken, child, chide, chip, chill, cheek, cheese, chest*, etc. – all of them originally had /k/ sound at the beginning.

#### **The role of analogy**

The Neogrammarians thought that **analogy** inhibited the regular operation of sound laws in particular word forms.

\*In the course of the 20th century, however, it has come to be recognized that analogy, taken in its most general sense, plays a far more important role in the development of languages than simply that of sporadically preventing what would otherwise be a completely regular

transformation of the sound system of a language. When a child learns to speak he tends to regularize the anomalous, or irregular, forms by analogy with the more regular and productive patterns of formation in the language; e.g., he will tend to say “comed” rather than “came,” “dived” rather than “dove,” and so on, just as he will say “talked,” “loved,” and so forth. The fact that the child does this is evidence that he has learned or is learning the regularities or rules of his language. He will go on to “unlearn” some of the analogical forms and substitute for them the anomalous forms current in the speech of the previous generation. But in some cases, he will keep a “new” analogical form (e.g., “dived” rather than “dove”), and this may then become the recognized and accepted form.

Once it was acknowledged that sound change was a regular process, which operated without exceptions, it became possible for the study of *etymology* (i.e., history of words, and by extension – languages) to become truly scientific. A sound correspondence or a similarity between two languages was shown to be inconclusive evidence for linking them genetically, unless that change was proven to be *systematic* and *regular*. It is therefore very important to distinguish between a *systematic* (or *regular*) sound correspondence and an *isolated* correspondence.

Although the Young Grammarians’ claims have been substantially modified, it was an important achievement then to realize that language changes were not just random tendencies, but definite and sometimes clearly defined ‘laws.’

The work of all these linguists, their concern with reconstructing PIE, and making hypotheses about the way it split into the various daughter languages, reflected the general direction of 19<sup>th</sup> century thought. In 1859, Darwin published his famous *Origin of the Species*, putting forward the theory of evolution. Darwin’s theory strongly influenced the way linguists viewed languages. They began to see them as biological organisms, which had family trees and ancestors. They postulated that if two or more languages had many **similar words** with **similar meanings**, then they had evolved from the same parent language. This hypothesis was based on the assumption that languages change in **regular, systematic** ways. Differences between related languages were due to **regular sound changes**, which could become evident through careful study.

### Comparative Linguistics

For the first time in the long history of linguistics, people realized that languages change over time: their sounds, their syntax, and their meaning. We don’t usually notice this gradual change, just like we do not notice ourselves changing from day to day. The sounds and structure of the languages we speak appear to be static - they do not change every day! Yet one glance at the works of Chaucer, or even Shakespeare shows how much English has changed in a relatively short time.

A few examples of ongoing change in English:

- **Phonological:** [j] sound which occurs before [u:] in *tune*, *duty*, *dune*, etc., seems to be dropping out, especially in American English. It has already disappeared in words like *rule* and *lute*. Soon it may drop out entirely, as it has in the East Anglian region of England.

- **Syntactic:** The use of pronouns *I* and *me*: It used to be considered wrong to say ‘It’s me’ – everybody says it now! ☺ As for unorthodox switching of word and phrase functions – you only need to listen to the BBCWorld or CNN news to get some nice examples: ‘... a special **live** from Jerusalem,’ ‘we bring you Jenny – live!,’ ‘a bottoming out of oil prices’ – to mention just a few.
- **Lexical and Semantic:** new words, expressions and meanings reflect new concepts in our changing reality: who would have understood you just 30 years ago, if you started talking about buying a new mouse, installing a browser, keeping an active window/ cell/ file/ spreadsheet, accessing the web, texting somebody, using cursor keys, or passing e-waste? ☺

The vastness of our collective mind ensures the slow rate of linguistic change – it takes time for numerous individual minds that make up the society to all together switch to new usage or make a new generalization (‘flex’ took some time to sink into our minds ☺). This allows us to adapt to language change as it happens, so we don’t really notice it.

Modern linguistics often separates the past and the present into different areas of enquiry. It has been a common assumption that **synchronic** linguistics, which concerns itself with the state of languages at any given point in time, in particular the present, has little or no relationship with historical or **diachronic** linguistics, which focuses on language change over time.

No strict division between the two aspects of the study of language can be made, however: while the synchronic study of linguistic systems can provide insights useful in reconstructing their past, we should remember that language never stops changing, which makes any ‘frozen,’ static representation of language systems at any point in time superficial. All languages have numerous irregularities difficult to explain in synchronic terms - they can only be explained by reference to the past.

### **Other 19th-century theories and developments**

One of the most original, if not one of the most immediately influential, linguists of the 19th century was **Wilhelm von Humboldt** (he died 1835). His interests, unlike those of most of his contemporaries, were not exclusively historical. Following the German philosopher **Johann Gottfried von Herder** (1744–1803), he stressed the connection between national languages and national character (a figment of romantic imagination, of course!)

More original was **Humboldt's theory of “inner” and “outer” form in language**. The outer form of language was the raw material (the sounds) from which different languages were fashioned; the inner form was the pattern, or structure, of grammar and meaning that was imposed upon this raw material and differentiated one language from another. This “structural” conception of language became dominant, for a time at least, by the middle of the 20th century. He first described language as a rule-governed system which makes *infinite use of finite means* (*Über den Dualis*, 1827).

Another of Humboldt's ideas was that language was something dynamic, rather than static, and was an *activity* itself *rather than the product* of activity. A language was not a

set of actual utterances produced by speakers but the underlying principles or rules that made it possible for speakers to produce such utterances and, moreover, an unlimited number of them.

Humboldt's distinction of inner and outer form influenced the thought of **Ferdinand de Saussure**, a Swiss linguist sometimes called the 'Father' of modern linguistics (we'll 'do' him next week ☺). But its full implications were realized only in the middle of the 20th century, when **Noam Chomsky** re-emphasized it and made it one of the basic notions of generative grammar.

Phonetics and dialectology: Many other interesting and important developments occurred in 19th-century linguistic research, among them work in the areas of phonetics and dialectology. Research in both these fields was promoted by **the Neogrammarians'** concern with sound change and by their insistence that prehistoric developments in languages were of the same kind as developments taking place in the languages and dialects currently spoken.

The development of phonetics in the West was also strongly influenced at this period, as were many of the details of the more philological analysis of the Indo-European languages, by the discovery of the works of the Indian grammarians who, from the time of the Sanskrit grammarian **Panini** (5th or 6th century BC), if not before, had arrived at a much more comprehensive and scientific theory of phonetics, phonology, and morphology than anything achieved in the West until the modern period.

### **Conclusion**

The development of linguistic thought in the 19<sup>th</sup> century in the 'historical' direction reflected the general scientific thrust of the time (Darwin's Theory of Evolution). Kick-started by the discovery of similarities between languages that could only be explained by their common origin, comparative and historical study of languages flourished in the 19<sup>th</sup> century Europe.

Among other influential ideas of the time were

1. observations about the duality of language (which allows us to make *infinite use of finite means*), and
2. **Panini**'s study of linguistic sound system & the concept of 'phoneme.'

## Appendix: Grimm's Law

Grimm's Law: a statement of the relationship between certain consonants in Germanic languages and their originals in Indo-European.

Etymology: Discovered by Danish scholar Rasmus Rask (1818) and popularized by German philologist Jacob Grimm (1819)

Examples and Observations:

"Rask's and Grimm's work . . . succeeded in establishing once and for all that the Germanic languages are indeed part of Indo-European. Secondly, it did so by providing a brilliant account for the differences between Germanic and the classical languages in terms of a set of amazingly systematic sound changes."

(H. H. Hock and B. D. Joseph, *Language History, Language Change, and Language Relationship*. Walter de Gruyter, 1996)

"Grimm's Law can be considered a chain reaction: aspirated voice stops become regular voiced stops, voiced stops in turn become voiceless stops, and voiceless stops become fricatives. . . .

"Examples of this change taking place at the beginning of words are provided in (1) . . . Sanskrit is the first form given (except for *kanab* which is Old Persian), Latin the second, and English the third. It is important to remember that the change takes place only once in a word: **dhwer** corresponds to door but the latter does not change to *toor*:

Bhrater	-	frater	-	brother
Dhwer	-	foris	-	door
Ghordho	-	hortus	-	yard (<Old English geard)
Pitr	-	pater	-	father
Tu	-	tu	-	thou
Kruga	-	cornu	-	horn
Kanab	-	cannabis	-	hemp (<Old English henep)
Danta	-	dentis	-	tooth
Jna	-	gnoscere	-	know/ken

Thus, Grimm's Law distinguishes Germanic languages from languages such as Latin and Greek and modern Romance languages such as French and Spanish. . . . The change probably took place a little over 2,000 years ago."

(Elly van Gelderen, *A History of the English Language*. John Benjamins, 2006)

"It remains unclear whether Grimm's Law was in any sense a unitary natural sound change or a series of changes that need not have occurred together. It is true that no sound change can be shown to have occurred between any of the components of Grimm's Law; but since Grimm's Law was among the earliest Germanic sound changes, and since the

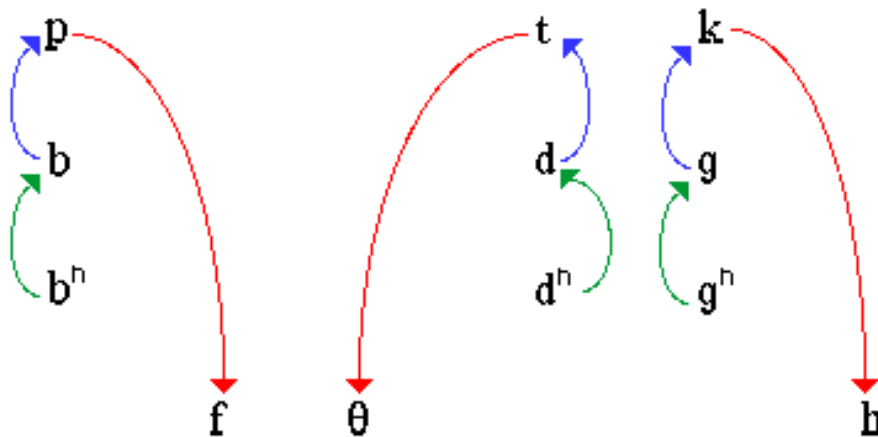


other early changes that involved single non-laryngeal obstruents affected only the place of articulation and rounding of dorsals . . . , that could be an accident. In any case, Grimm's Law is most naturally presented as a sequence of changes that counterfered each other."

(Donald Ringe, A Linguistic History of English: From Proto-Indo-European to Proto-Germanic. Oxford Univ. Press, 2006)

Also Known As: Germanic Consonant Shift, First Consonant Shift

### Grimm's Law



voiceless stops --> voiceless fricatives

voiced stops --> voiceless stops

voiced aspirated stops --> voiced stops

I.E. Gmc

p > b, v

t > d, ð

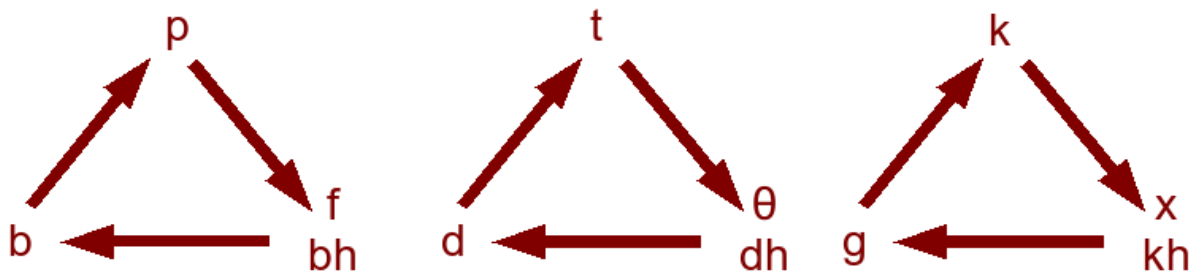
k > g, w

**Proto-Indo-European Consonant System**

	Labial	Dental	Velar	LabioVelar
Aspirated Stops	*bh	*dh	*gh	*g <sup>w</sup> h
Voiced Stops	*b	*d	*g	*g <sup>w</sup>
Voiceless Stops	*p	*t	*k	*k <sup>w</sup>

domestic	*d	tame
sedentary	*d	sit
<i>persuade, dissuade</i>	*d	sweet
exude < ex-sudare	*d	sweat
dentist	*d, *t	tooth
agriculture	*g	acre
genus, generous	*g	kin, kind
<i>genuflect</i> (< Latin)	*g	knee
<i>polygon</i> (< Greek)	*g	knee
ignore (< Greek)	*g	know
mega- (< Greek)	*g	much
gynecology (< Greek)	*g <sup>w</sup>	queen
beef	*g <sup>w</sup> (< b in Latin), *w	cow
<i>tripod</i>	*p, *d	foot
pork	*p, *k	farrow < OE fearh
Pisces, piscatorial	*p, *sk	fish
patriot	*p, *t	father
tumor	*t	thumb
<i>extrude, intrude</i>	*t, *d	threat
<i>decline, incline, etc.</i>	*k	lean < OE hlæne
capture	*k, *p	have, heft
lucid	*k, *d	light
quantity	*k <sup>w</sup>	wh- of all question words
nocturnal	*k <sup>w</sup>	night
quiet, tranquil	*k <sup>w</sup>	while
libido	*bh	love
fertile	*bh (> f in Latin)	bear (verb)
fragment, fracture	*bh, *g	break
fraternal	*bh, *t	brother
foreign, forest	*dh (> f in Latin)	door (originally meant outside, the area not in town)
figure	*dh, *gh	dough
<i>obfuscate</i>	*dh, *sk	dusk
mechanical	*gh	might
host	*gh (< h in Latin), *st	guest
<i>defend, offend</i>	*gh <sup>w</sup>	gun
vodka	*w, *d	wet
view < Latin videre	*w, *d	wit
vehicle	*w, *gh	wagon
<i>conjugal, jugular</i>	*y, *g	yoke

<b>Table 1: Labial and Dental Stops in the Indo-European Languages</b>				
Greek	Latin	Gothic	Sanskrit	Slavic
p	p	f	p	p
b	b	p	b	b
ph	f/b	b	bh	b
t	t	e	t	t
d	d	t	d	d
th	f/d	d	dh	d



<http://grammar.about.com/od/fh/g/GrimmsLawterm.htm>