- Group of young academics at Leipzig U. in 1870's
- Some of them make a splash with new discoveries and hypotheses about Indo-European, not altogether well received by their professors
- Also a generational conflict, but primarily a genuine scientific revolution in goals, methods and internal architecture of comparative and historical linguistics
- Map of linguistics (not only Indo-European) largely redrawn in about 20 years
- Karl Brugman(n), Hermann Paul, Hermann Osthoff, Karl Verner, August Leskien, Berthold Delbrück, Eduard Sievers

One flashpoint: the vowel system

Sanskrit		Greek	
i	~	i	
u	~	u	
		(e)	
a	~	{a }	
jajana		lacksquare	gegona
			'I gave birth'

→ which is the original (or at least more archaic)?

Before 1870's (with few exceptions): Sanskrit is the more archaic, thus:

PIE a > Gk a, e, o

Brugmann & others: Greek is more archaic, thus: PIE a, e, o > Skt a

→ entire Ablaut theory must be reformulated!

Ablaut: system of vowel alternations (sing~sang~sung)

Earlier analysis (e.g. Schleicher): $b^h r - a^h a r - b^h a r$

Neogrammarians:

* b^her - > Gk p^hero , OE beran (to bear), La fero 'I carry'

* b^hor - > Gk p^horeo 'I keep carrying', OE bær 'I carried'

* $b^h\bar{e}r$ - > OE $b\bar{e}r$ on 'they carried'

* $b^h \bar{o}r$ - > Gk $p^h \bar{o}r$, La $f \bar{u}r$ 'thief'

* b^h r- > E born, G geboren

General insights:

- Language cannot be studied independently of speakers (as opp. to organic view)
 - interest in physiology (articulation) & psychology
 - no life cycle, "energy" etc., lang. not organism
 - phonetics becomes part of linguistics
 - Eduard Sievers (1876) *Grundzüge der Lautphysiologie* (Fundamentals of Speech Physiology)
 as introduction to Indo-European linguistics

General insights:

- Uniformitarianism (as opp. to catastrophism)
 - fundamental principles of how languages work and change are constant
 - no radically different stages in history of Ig separated by cataclysmic events
 - → Schleicher: no sound change or analogical change in prehistory of languages)
 - first in geology, then spreads into all historical sciences (cf. variety of physical landscape caused by few general mechanisms)

But what are the general principles of language change?

E.g. Sound changes have no exceptions

→ hotly debated debated by many, counterexamples are not difficult to find; but what was the point?

Partly a matter of methodology: apparent exceptions probably have some other explanation, e.g.:

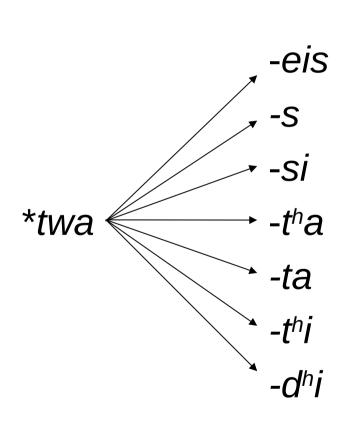
- borrowing: shell, shoe, shake vs. sky, skin
- dialect mixture: read, meat /i:/ vs. great, break /ei/
- interference of morphology:
 what, swan, want /p/ vs. swam /æ/

Partly a matter of principle, of the general architecture of language: sound changes are not subject to factors outside phonology (grammatical category, meaning, function)

→ very important consequences for historical linguistics!

But what does this mean exactly?

Cf. Schleicher's derivation of the 2Sing affixes:



The problem is not that the phonetic distance is great in some of these cases – the problem is that the relation is phonetically *not systematic:* there is no *tw* ~ *s* correspondence etc. elsewhere!

For linguists before 1870's morphology overrode phonology – Neogrammarians turn this around!

If there is no phonological correspondence, there is no correspondence at all!

Other ex.: Future in Latin and Greek

La $time-\mathbf{b}-o \sim Gr time-\mathbf{s}-o$ ('I'll fear/respect')

 \rightarrow does not point to future marker in Proto-IE bec. no $b \sim s$ correspondence elsewhere!

If there is no phonological correspondence, there is no correspondence at all!

By contrast: Comparative in Hu and Finnish

úja-**bb** ~ uude-**mpi**

- cf. hab ~ kumpoa, lúd ~ lintu, had ~ kunta, dug ~ tunkea...
- → comparative affix in Proto-Finno-Ugric ✓

Phonological analysis precedes morphological analysis.

One of the cornerstones of comparative and historical linguistics to this day!

Not only because of this, but Neogrammarians rewrote practically all historical & comparative linguistics; great works, Paul (1880) *Prinzipien der Sprachgeschichte,* Brugmann (1886–93) *Grundriss der vergleich. Gramm.*

Later 19th century: other issues

Dialect geography and the wave theory

- Georg Wenker (contemporary of Neogr's)
- collected data on Old High German C Shift

Old High German Consonant Shift (partial)

Gmc > OHG ex.: English ~ MoGerm

p pf/ff pepper Pfeffer

t ts/ss ten zehn

k x (ch) break brechen

 θ d three drei

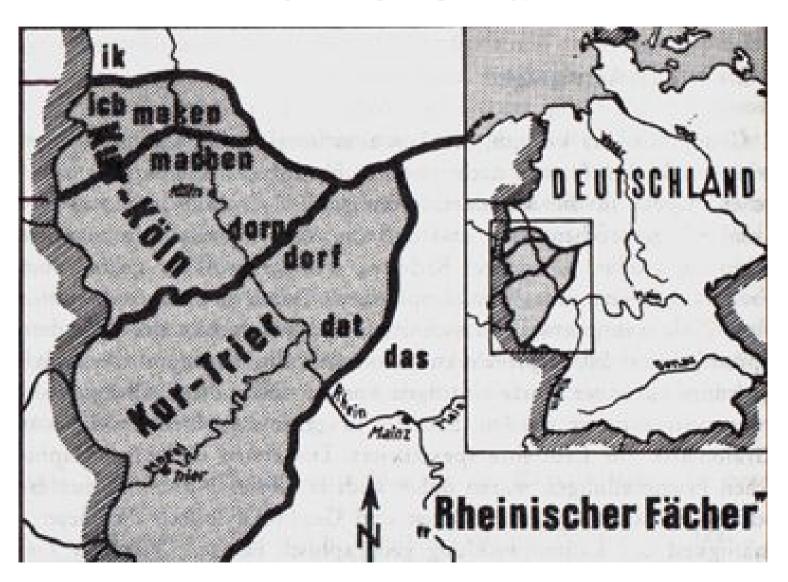
abfrift 2. II. 84. W. 57097 N4,84 Hagenest In Wheel's fling'n de davon blattir in It dift view. b first glai riff 3' finin, nofif'n mard's Matter mille buffer. Lick Bally, in Uffir, top d' Will ball kingt. Dan guta offe Moun it with Lara hingt fil gbriefe in int kalla thoffe gfoller. 5. a is one wine adde Jacks While giftions. " of the d'fire imm's ofur Tolly in Staffer. I Leave the pair finte wind, if glooms, if former fring lof w. I if bin bai das Too great imporement or g'fant, in fa fanta, freallab of afrew Fift Truft's fof. 10. if will of nin trille of his min trille Afr. if pfloft of glai with Rinflaffl in I Ufo'n , In Offn! The girlf an foun, fill'a mir mitter gial? 13. 6 fine player Zail'n. Mai liamab Rand, black fin ougun pfliage, d'binfir Gaufa baighi d'f tied. D'fost faite am meroffl'u g'laout in bist ool'g g'wast, I'vroff if farme girl al & d'annow. 16. I bist na mis grins g'ming, anna Sloffe Whin and touten, I wingst ifoff not a Holl in workfor in graffy grages I'v brookly varue moils. 18 Ja, man I'm g'kannet fatto!

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- collected data on Old High German C Shift
- result: south to north gradually fewer sounds affected by shift → Rhenish fan / Rheinischer
 Fächer (images from www.uni-marburg.de)

The Rhenish fan

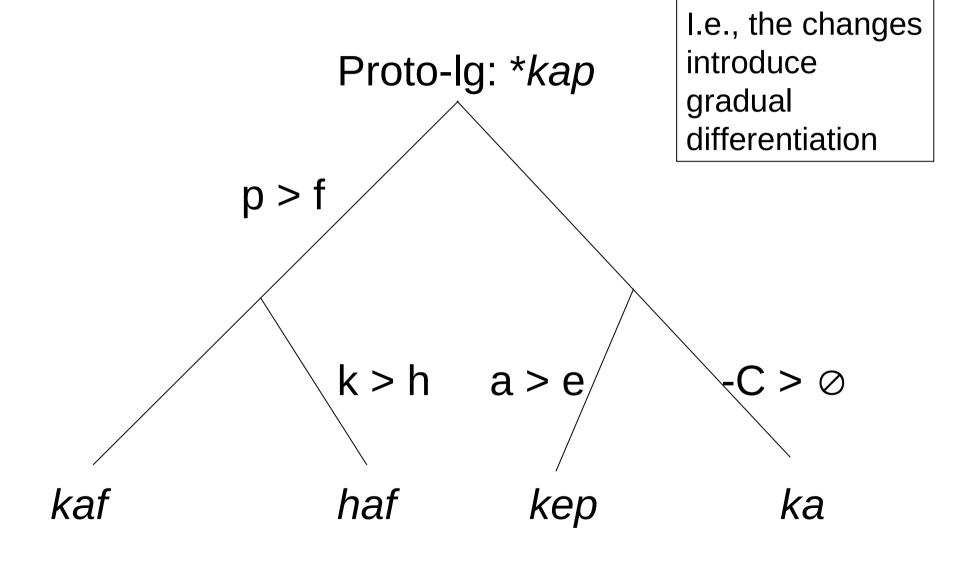


Later 19th century: other issues

Dialect geography and the wave theory

- Georg Wenker (contemporary of Neogr's)
- collected data on Old High German C Shift
- result: south to north gradually fewer sounds affected by shift → Rhenish fan / Rheinischer Fächer
- conclusion: sound changes spread in time and space like waves
- which is a challenge to the family tree model

Family tree model of change



The spread of change (wave theory)

