

Linguistic Theory

Gramley, WS 2008-09

Historical Linguistics

Sichelschmidt

Linguistics:

**formal (structural) and
functional**

Theory:

Observation -> theory (positivism)

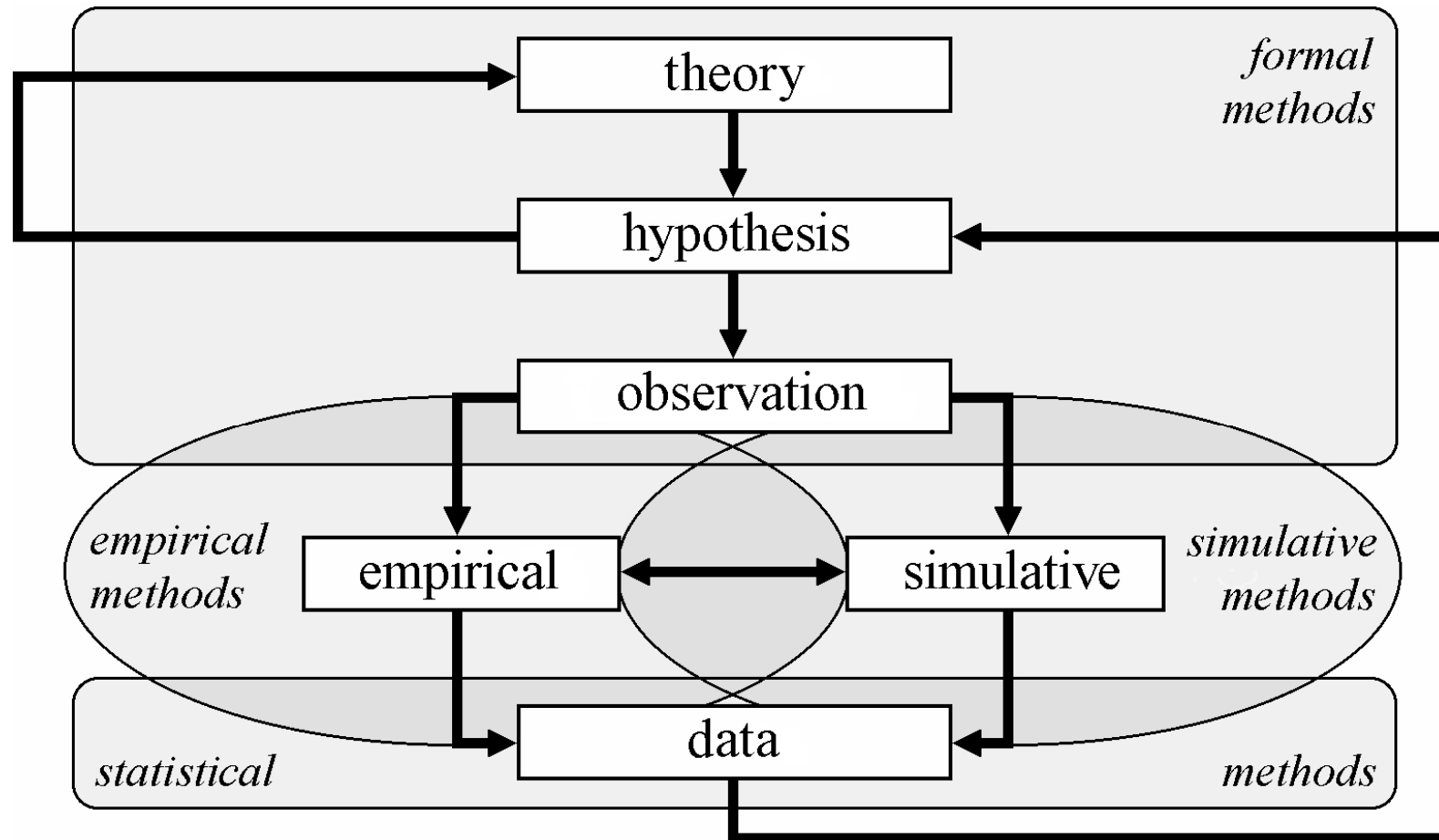
Theory - > observation (rationalism)

Methodology:

be wary of intuition and speculation (esp. about idealized speakers)

Investigation should

- be empirical**
- be systematic**
- not be opinion but statements supported by evidence**
- clearly define the variables**



Rudimentary theory -> Hypothesis -> Observation -> Verification or Falsification

If falsification -> New theory

Theory: A theory is a more or less elaborated system of statements about external states of affairs (Lakatos 1977). In order to qualify as a scientific theory, it must be built on an unbroken chain of statements; it must be logically consistent; and it must in principle be falsifiable.

Hypothesis: A hypothesis is a testable prediction of what is to be observed under specific circumstances, provided that the theory is true (Tredoux / Durrheim 2002). In linguistics, we are faced with two common types of hypotheses:

- **General hypotheses** claim a universally valid relationship.
Regardless of whether or not they are factually true, such hypotheses cannot be verified directly; they can only be falsified by counterexamples.
- **Existential hypotheses** claim the existence of something.
Regardless of whether or not they are factually true such hypotheses can only be verified but not be falsified.

Observation: This is a systematic way of making relevant external information available to the senses of an interested individual.

Historical Linguistics (Barber)

Linguistic Change

What are sound laws?

Examples:

- Grimm's Law
- Verner's Law
- The Second Germanic Sound Shift
- The Great Vowel Shift

What are language families?

Groups of languages which are presumed to have developed from the “same” source language

Language Families. Lack of contact leads to the development of distinctive dialects. When mutual comprehensibility is lost we speak of different languages [though this is also an eminently political questions, too].

Convergent Development. As when the Italic languages “merged” into Latin. This is sometimes a matter of conquest, but also of state, national, culture, [economy,] education, and prestige which produce a standard language (to the detriment of the non-standard forms). Example Greek *koiné*. This speaks against a pure hereditary model.

Language families of the world

"World"

I
Southeast
Asian

Austic

Australian

Indo-
Pacific

II
North
Eurasian

Sino-
Caucasian

Amerind

Nostratic

III
African

Congo-
Saharan

Niger-
Kordofanian

Nilo-
Saharan
Khoisan

Do the languages of the world have a single source?

The highly hypothetical division of the languages of the world into language families (previous slide) proceeds from the conjecture that human language emerged between 50,000 and 150,000 years ago.

There is some corroboration in genetic evidence, which puts the emergence of humankind at about 100,000 to 200,000 years ago, probably in Africa.

The divisions indicated by I, II, and III might lie about 45,000 years in the past according to some DNA-research (Cavalli-Sforza).

Nostratic (10,000+ years ago)

- **Eskimo-Aleut (Innuit, Aleut)**
- **Dravidian (Tamil)**
- **Kartvelian (Georgian)**
- **Altaic (Turkish, Mongolian, Sibirian, Japanese, Korean)**
- **Uralic-Yukaghir (Finnish, Estonian, Hungarian)**
- **African-Asiatic, aka Semitic (Arabic, Hebrew)**
- **Indo-European (eleven branches)**

Today approx. 50% of the world population speaks a language in this group.

Indo-European

- **(Hittite)**
- **Indian (Sanskrit, Pali, Prakrit) Hindi, Urdu, Bengali, Punjabi, Marathi, Sinhalese, Romany**
- **Iranian (Avestan, Old Persian, Pahlavi) Farsi, Afghan, Baluchi, Kurdish**
- **Armenian**
- **Hellenic (Classical Greek, Koiné) Romaic**
- **Albanian**
- **Italic (Latin) French, Provençal, Catalan, Spanish, Portuguese, Romanian, Rhaeto-Romanic, Italian**
- **Balto-Slavic (Prussian) Latvian, Lithuanian; (Old Church Slavonic) Russian, Belorussian, Ukrainian; Polish, Czech, Slovak, Sorbian; Serbo-Croatian, Slovene, Macedonian, Bulgarian**
- **Germanic (see below)**
- **Celtic (Cornish, Manx) Welsh, Breton, Irish, Scottish Gaelic**
- **(Tocharian)**

Germanic

East Germanic (Gothic)

**North Germanic (Old Norse) Icelandic, Norwegian, Swedish,
Danish, Faroese**

West Germanic

**Low German (Old English, Old Saxon, Old Low
Franconian, Old Frisian) English, Plattdeutsch, Dutch-
Flemish, Frisian**

**High German (Althochdeutsch) German [Franconian,
Alemannic, Bavarian,...], Yiddish**

The First Germanic Sound Shift (Grimm's Law) includes the following shifts:

Aspirated voiced stops		Voiced stops		Voiceless stops		Voiceless fricatives
bh	>	b	>	p	>	f
dh		d		t		θ
gh		g		k		h

I-E		Germanic		(Latin)		(English)
b	>	p		lubricus	>	slippery
			(OBul)	slabu		sleep
d	>	t		ad	>	at
g	>	k		jugum	>	yoke
p	>	f		piscis	>	fish
t	>	θ		tres	>	three
k	>	x (h)		cordis	>	heart

Verner's Law

However, IE **fadēr* became not **faθēr*, but *faðēr*.

Note: Voiceless fricatives became voiced if the preceding syllable was unstressed (Verner's Law).

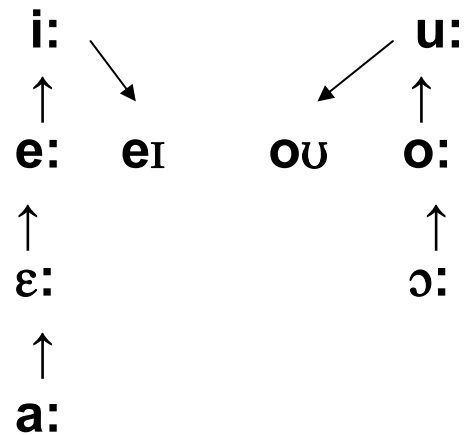
IE	p	t	k	k ^w
Grimm	ϕ / f	θ	x / h	x ^w
Verner	β	ð	ɣ	ɣ ^w

The Second (or High German) Sound Shift explains many of the differences between German and English:

<u>English</u>		<u>German</u>		<u>English</u>		<u>German</u>
p	>	pf (initial)		f	>	f
		f (medial, final)				
t	>	ts (initial)		ð	>	d
		s (medial, final)				
k/tʃ	>	k(x) (initial)		h	>	h
		x (medial, final)				

Supply examples (English and German words) for the correspondences in the Second Sound Shift.

The Great Vowel Shift



Examples of the shift:

tima → **time**

teman → **teem**

team → **team**

tam → **tame**

ful → **foul**

fol → **fool**

fola → **foal**

Mechanisms of Linguistic Change.

What causes does Barber list?

Barber clearly rejects:

- **topographical causes ("Bergsteigertheorie")**
- **climatic causes**
- **racial causes**

But he mentions:

- **substrate speech habits (= immigrants, conquered subjects)**
- **fashion (= prestige)**
- **economy of effort (= assimilation)**

Redundancy (= "margin of safety")

Systemic factors (= chain shifts; functional load)

Borrowing

from other languages

from other varieties (of the same language)

Analogy (= regularization)

Linguistic Evolution (Smith)

The Evolutionary Model.

Darwinistic terms:

- **mutation** (source of variation)
- **selection** ("survival of the fittest")
- **non-teleological** (This supports, rather, the idea of the “equality of species,” viz. that each species is good for the environmental niche that it fills. The idea of progress in language and of primitive and advanced languages has been completely rejected (42).)

Linguistic change had to do with **“the greater or lesser fitness of the forms which arise”** (Paul 1888: 13), a version of the survival of the fittest.

In the case of Paul this meant **“survival of variant forms of highest frequency in a particular speech-community.”** So in the Germanic community **“many millions of usage-occurrences”** determined that the <p> of Proto-Indo-European should become the <f> of Proto-Germanic (*father, fish*) (39).

Linguistic Variation and Constraint. Languages vary, all languages do (except dead ones and artificial ones). The variation may be diatopical (geographical) or according to age, class, or style. This variation lies at the heart of linguistic change because change depends of the availability of variants (Smith: 43). The systematic choice of a given variant (innovation) for conventional use is the essence of linguistic change.

According to Weinreich:

- (1) actuation,
- (2) implementation, and
- (3) diffusion

according to Smith

- (1) potential for change
- (2) triggering and implementation of change
- (3) diffusion of change.

[Note the need for a mechanism, viz. abduction, to explain the way this change takes place; see homework.]

De Saussure disagreed because Paul and the Neo-Grammarians had failed to appreciate system and had not distinguished between *langue* and *parole*, system and substance.

True change is systemic and implies functional change. Yet Saussure did not reject the Darwinian model; “rather, de Saussure’s ideas on variant forms acquiring useful functions (and discarding unneeded ones) as *langue* changed were closer to true Darwinian theory than Paul’s, and placed linguistic Darwinism on a firmer theoretical footing. The Saussurean model has remained a dominant one for historical linguists ever since.” (40)

Biological evolution leads to the separation of species (irreversible), something not true of languages. While English and German had a common ancestor, they have also been formed by languages which they have been in contact with. Features are not hereditary alone; acquired features can also be adopted (and then passed on) (43).

Within a speech community come (in addition) “the constraints of pragmatic interaction and of social setting” and “there are powerful forces to do with social stigmatisation.”

Smith emphasizes redundancy without which unintelligibility is a risk; too much redundancy and possible contradictory cues puts the system under pressure (cf. Jespersen 1941: *Efficiency in Language Change*).

A key notion is *variational space*, the broad slots of *parole* in the *langue* which incorporates the expression of a meaning (44). Note: “Variational spaces can overlap, and such overlaps are typically the sites of change in the linguistic system.”

“Similarly, in grammar, formal and informal usages can exist side by side within the same Variational space, for instance *isn't* and *is not* occupy the same slots in the sentences *That isn't right* and *That is not right,...*” (45)

Another source of change is *phonological stress* and *analogy*, which tends to level irregular forms.

Contact between Linguistic Systems. Yet there is never stasis; no system reaches a self-corrected optimum. This is often the result of contact and the borrowing of grammatical structures, sounds, and, of course, words (47).

Isolation slows change down (cf. Icelandic; rural vs. urban language).

“Change is peculiarly [sic] liable to occur when large-scale immigration, invasion or social revolution takes place; it also tends to happen more quickly in towns, where large numbers of people, many with quite distinct linguistic systems, interact with each other” (48).

The latter are often “weakly tied” and open for mobility (“class-mobile”); here the NORMS (“non-mobile older rural males”) are of less interest.

There is variation in the speed of change (“punctuationism” (48) or the “theory of punctuated equilibrium”) (49).

Trees and Waves. The first uses the process of inheritance; the second, borrowing. In the first case, children reproduce the language of their parents; in the second, that of their peers. The same is sometimes said of languages.

Smith emphasizes speaker innovations interacting **“with their intra- and extralinguistic environment, which forms a system; and these interactions can cause system-wide changes”** (51). The process of interactive reinforcement Smith likes to call the **snowball effect**. Furthermore, change can be multi-causal (52).

Criticism of Early Indo-European Studies

“But although no one would deny that the comparativists^[1] succeeded in opening up a new and profitable field of investigation, they did not manage to found a true science of linguistics. For they never took very great care to define exactly what it was they were studying. And until this elementary step is taken, no science can hope to establish its own methods.” (Saussure: 3)

^[1] Esp. Franz Bopp, Jacob Grimm, August Friedrich Pott, Theodor Benfey, Theodor Aufrecht, Max Müller, Georg Curtian, August Schleicher (among others)

“The first mistake made by the comparative philologists was one which contains the seeds of all their other mistakes. Their investigations, which were in any case limited to the Indo-European languages, show a failure to inquire into the significance of the linguistic comparisons they established and the connexions they discovered. Comparative grammar was exclusively comparative, instead of being historical. Comparison is no doubt essential for all historical reconstruction. But in itself comparison does not warrant drawing conclusions. And the right conclusion was all the more likely to elude the comparativists because they looked upon the development of two languages much as a naturalist might look upon the growth of two plants. ...” (Saussure: 3f)

“An exclusively comparative approach of this kind brings with it a whole series of mistaken notions. They have no basis in reality and fail to reflect the conditions which do obtain in language everywhere. At that time languages were looked upon as belonging to a province of their own, a fourth realm of nature. Hence forms of reasoning were permissible which would have shocked any other science. ... From a methodological point of view, however, it is of some interest to be acquainted with these errors.” (Saussure: 4)

“The achievement of the Neogrammarians was to place all the results of comparative philology in a historical perspective, so that linguistic facts were connected in their natural sequence. The Neogrammarians no longer looked upon a language as an organism developing of its own accord, but saw it as a product of the collective mind of a linguistic community. At the same time, there emerged a realisation of the errors and inadequacies of the concepts associated with philology and comparative grammar.[\[1\]](#) (ibid.: 5)

“[1] The Neogrammarians, being more down-to-earth than the comparativists, attacked the comparativists’ terminology, especially its illogical metaphors. From then on it became unacceptable to say ‘the language does this or does that’, to speak of the ‘life of the language’, and so on, because a language is not an entity, and exists only in its users. ...”

Homework: Read the link on abduction.
Do the reading in de Saussure.

Literature:

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