



#### The Sound Laws

• The systematic comparison of lexical items, like 'five' in the previous table, led to the discovery of the sound laws:

p: f – pater: fadar, piscis: fisks, potis: -faþs, póds: fotus, pekus: faihu

 Rask, and later Grimm, observed that these systematic correspondences were not only found in lexical items, but across the board in several European and Asian languages:

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#### Grimm's Law

p > f, t > b, k > x (h); b > p, d > t, g > k; bh > b, dh > d, qh > q

- This led to the insight that f in Germanic not only corresponds to p in most of the other languages but also that it had developed from p.
- The method was further refined by Verner who identified the phonological conditions behind some alternations:

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#### Verner's Law

 treis: prír bhrá:te:r: bro:þar paté:r: fadar
 Initial position Stressed vowel Unstressed

- On the basis of comparison of inflectional forms morphological correspondences can also be established, such as inflectional and derivational morphology.
- The Comparative Method represents one of the major revolutions within linguistics, as it constitutes the most powerful tool for establishing

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# Form-Function Correspondence

- The fundamental assumption within the Comparative Method is that one reconstructs on the basis of form-function correspondences:
  - Similar form is not enough to establish correspondences as a basis for reconstruction
  - Similar function is not enough to establish correspondences as a basis for reconstruction either
- In order to reconstruct there has to be a form– function correspondence; e.g. paté:r and fadar are cognates with the same lexical meaning, hence we get a form–meaning correspondence.

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### Syntactic Reconstruction

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- The Comparative Method has not been equally successfully applied to syntax
- Sentences were regarded as fundamentally different from lexical items and morphemes, not involving a form-function correspondence but only structure
- No "syntactic laws" corresponding to sound laws can be shown to operate

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### Syntactic Reconstruction

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Jeffers (1976: 4) etc.: Sentences are different from words – comparing sentences across languages does not involve "cognate" material. One can compare the patterns which are instantiated by sentences, but patterns do not "evolve" the way sounds do. "The history of syntactic systems is a history of pattern replacement and reanalysis."

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# **Equivalent Sentences**

- 1

- a. Das Mädchen aß die Wurst. Modern German the.nom girl.nom ate the.acc sausage.acc 'The girl ate the sausage.'
- b. Stelpan borðaði bjúgað. Modern Icelandic girl-the.nom ate sausage-the.acc 'The girl ate the sausage.'
- In these Germanic examples, we have "equivalent" sentences. However, as there are no cognates here, there can be no reconstruction.

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# Equivalent Sentences with Cognate Material

Modern German

- a. Hans aß das Brot. Mo Hans.nom ate the.acc bread.acc 'Hans ate the bread.'
- b. Hans át brauðið. Modern Icelandic Hans.nom ate bread-the.acc 'Hans ate the bread.'
- Moreover, even though there is cognate material in equivalent sentences here, one would still not reconstruct such a sentence as existing in Proto-Germanic.

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# → We object:

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 As the verb 'eat' has cognates in all the Germanic languages and selects for Nom-Acc in all the Modern and ancient Germanic languages, the verb 'eat' can self-evidently be reconstructed for Proto-Germanic, with this particular case frame.

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## → We object:

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 We agree with Jeffers that one cannot reconstruct "utterances" for a proto-language, but we maintain that one should still be able to reconstruct argument structure constructions and sentence type constructions on the basis of the Comparative Method.

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# The "Discontinuity" Problem

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• Lightfoot (1979 etc.): Fundamental difference between sentences and words in that words are transmitted from one generation to another but sentences are not (discontinuity, cf. Harris & Campbell 1995: 371). On the basis of the input, language learners construct a grammar which generates sentences. Therefore, historical syntax is subject to different principles than the transmission of the vocabulary.

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# $\rightarrow$ We object:

- 1

• But the vocabulary is acquired in the same way, i.e. on the basis of the input. Children do not "inherit" the vocabulary of the previous generation, but build up their own vocabulary on the basis of the input. Lexical items are also abstractions.

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# → Harris & Campbell (1995: 347) object: 17

- a) Textual comparison: Biblical translations, for instance, make it possible to trace individual sentences across languages and time periods.
- Reconstructing syntax is about reconstructing patterns, neither individual sentences nor the grammars that account for them.
- c) It is in fact possible to establish correspondence sets in syntax, such as the equation involving nominative and dative subjects:

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### Correspondence Sets in Syntax

#### Nom-Acc

a. I like this foodb. Eg liker denne matenI like this food

Modern English Modern Norwegian

#### Dat-Nom:

c. *Mér líkar þessi matur* and

Modern Icelandic

me.dat likes this.nom food.nom

Old Norse

 Gode likað ure drohtnunge God.dat likes our living.nom 'God likes our way of living.' Old English

e. saei fauragaleikaida imma G the-one-that.nom liked-before him.dat

Gothic

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### → Harris & Campbell (1995: 347) object: 19

- d) **Relics/archaisms/exceptions** (Meillet's dictum: "We reconstruct on exceptions, not rules ...")
- e) **Directionality** of grammatical/syntactic change, known through historical linguistic research (e.g. partitive case < locative/ablative or genitive)</li>
- f) Analogy, areal features/borrowing, etc. linguists must be aware of such factors ···

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# → We add further objections:

2

- g) Functional equivalence of speech acts/sentence types: declaratives, questions, commands, exclamations, etc., are traceable across languages and periods.
- Most of the ancient IE languages have declarative word order in yes/no questions, with the addition of a question particle in the beginning of the sentence, signaling an interrogative clause. The question arises whether to reconstruct questions for the proto-language on the basis of this structure and function.

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# Reconstruction or Diachronic Interpretation

- This might be labeled "diachronic interpretation" (Klimov 1988), as opposed to syntactic reconstruction.
- This of course boils down to how one defines form.
   Jeffers and Lightfoot only define lexical or
   morphophonological material as "form". However, we
   maintain that schematic form is also form, and hence
   that a reconstruction, based on schematic form
   together with function should be possible for
   interrogative clauses in IE.

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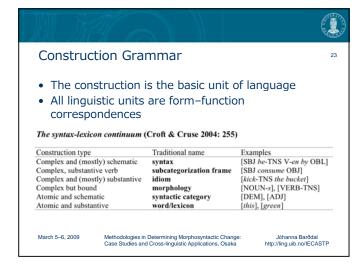
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h) **Syntax can be conservative**. It is not a given that patterns change, as long as there are patterns that we find in daughter languages that are also present in the older languages, there is no evidence of a change.

Cf. the verb 'like' in Germanic which was attested with Dat-Nom in 4th century Gothic and still occurs with Dat-Nom in Modern Icelandic, 16–17 centuries later.

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# The Integral Relation between Verbs and Argument Structure Constructions in CxG

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 CxG emphasizes the relation between lexical verbs and schematic argument structure constructions, which in turn means that argument structure constructions cannot be investigated in isolation from their instantiating verbs.

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#### The "Constructicon" in CxG

- Constructions are stored in the "constructicon"
- The theoretical inventory of a Constructicon, where all form-function correspondences of a language are stored, invites us to reconstruct syntax, as syntactic constructions and argument structure constructions would have a natural place there.
- The constructional inventory in a set of Constructicons for the individual IE languages would provide the correspondence sets for reconstructing a Constructioon for Proto-Indo-European.

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### General vs. Specific Constructions

- Constructions can be divided into specific constructions and general constructions (Tomasello 1998, Croft & Cruse 2004).
- The characteristics of the first is that the semantics of the whole is not derivable from the semantics of
- The characteristic of the second is that the semantics of the whole is derivable from the semantics of the parts

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# Specific (semantically non-compositional) constructions

- The English Incredulity Construction (Akmajian 1984, Lambrecht 1990, Tomasello 1998, Goldberg & Casenhiser 2006):
  - a. Him (be) a doctor!
  - b. My mother ride a motorcycle!
  - c. Them come to the party!
  - d. Him get first prize!
- Form: oblique argument in first position verb in the infinitive -XP (NP, PP) - exclamation mark (in writing) intonation of incredulity
- Meaning: Incredulity

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# General (semantically compositional) constructions

- The Icelandic Dative Subject Construction (Barðdal 2004, 2006, 2009):
  - Mér er djöfulli kalt. me.dat is devilishly cold I'm fucking cold.'

Mér leiðist þetta tómarúm. Dat-

me.dat bores this.nom empty-space.nom I'm bored by this emptiness.

c. Ef hundinum þínum líkar ekki við fólk ··· if dog.dat your.dat likes not with people 'If your dog doesn't like people ...'

Dat-

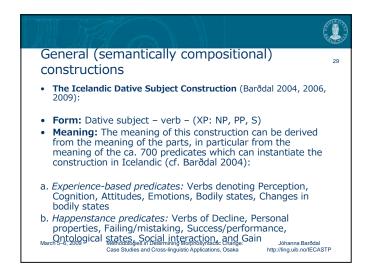
Dat-PP

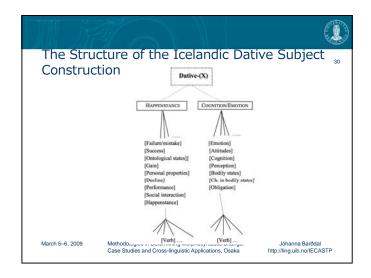
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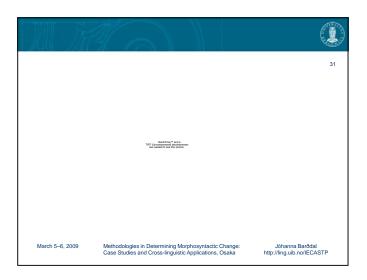
Hvað ef honum myndi skrika fótur eða ...

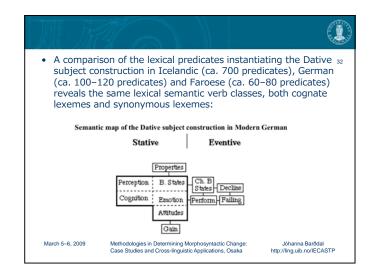
what if him.dat would lose foot.nom or March 5-6, 20 What if Methoclobolics in Retermining Morphosyntactic Change: Case Studies and Cross-Inguistic Applications, Osaka

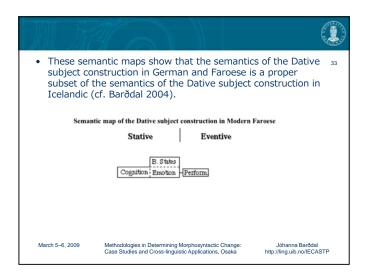
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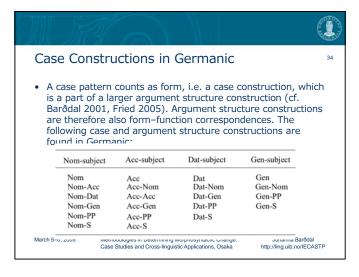














- The semantic map, shown earlier, only renders the semantics of the Dative subject construction in Modern Icelandic. Similar semantic analysis must be carried out for the Accusative and the Genitive subject constructions in Icelandic and for all the non-canonical subject constructions in all the other archaic and ancient IE languages.
- Such a semantic analysis would be based on lists of verbs, when such lists have been compiled, in order to throw light on whether we have a common point of origin or an independent

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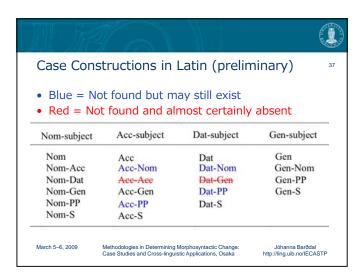


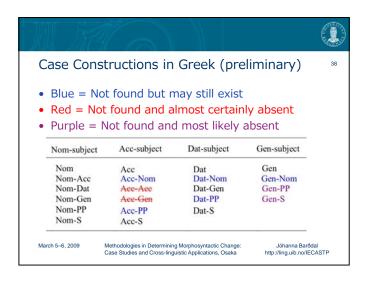
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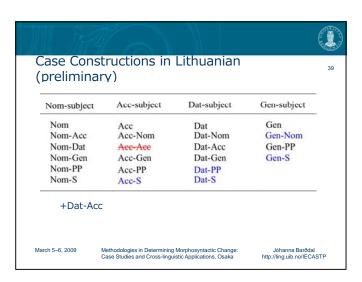
- In the languages that we have investigated the most, the Germanic languages, it turns out that the highest ranked argument of the argument structure construction is the argument that passes all the subject tests (Eythórsson and Barðdal 2005, Barðdal 2006), irrespective of case marking. It is also the lower ranked argument that behaves syntactically as an object.
- Future research will reveal whether this hypothesis also holds for the remaining IE languages.
- Nobody disagrees, however, that the Accusative of Acc-Gen argument structure construction is the highest ranked argument, and nobody demands evidence for an object analysis of the Accusative, although the research community demands that a corresponding subject analysis be shown beyond doubt (cf. Barðdal 2000).

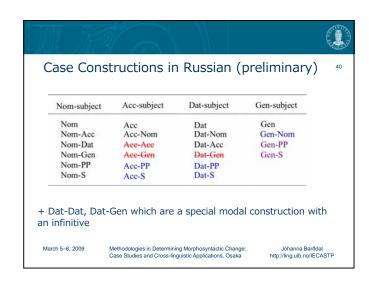
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# Cognate "Impersonal" Verbs

• At the onset of this research, we only know of **one** cognate 'impersonal' verb across the IE languages:

The only impersonal verb of this type [i.e. not a meteorological verb] in Latin with a cognate in another Indo-European language may well be *decet* ['be proper'] which is related to Greek *dokei moi* 'it seems to me'. (Bauer 2000: 146)

 Investigating the relevant case patterns and the lexical items instantiating them is the major task of our project, which is in turn incited by the integral relation in CxG between argument structure constructions and the lexical verbs that instantiate them.

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#### Historical Relatedness

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- The argument structure construction in Latin and Greek are a subset of the argument structure constructions in Germanic, which may suggest historical relatedness.
- The argument structure constructions that are a logical possibility, but are missing from the alignment tables, i.e. Acc-Dat, Dat-Dat, Gen-Acc, Gen-Dat and Gen-Gen, are common for all the language families. As we know of no universal principle which might exclude these patterns from human language, the common absence of these patterns is a significant fact, suggesting historical relatedness.
- It is already known that these language branches are related, meaning that the distribution of existing and lacking patterns must be reconstructed for a common proto-stage.

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#### The Basis for Reconstruction

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- Oblique subject constructions are exceptions from the canonical patterns of the languages
- Common case and argument structure constructions
- Common semantics
- Common systematic gaps

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# The Typological Status of the Alignment System in Proto-Indo-European

- Nominative–Accusative
- Ergative-Absolutive
- Tripartite
- Stative-Active
  - Split-S
  - Fluid-S

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# The Typological Status of the Alignment System in Proto-Indo-European

• Given a reconstruction of the case and argument structure constructions in the preceding tables for the proto-language, the logical analysis of the alignment system of Proto-Indo-European is that it was a Fluid-S language (rather than Split-S), in conformity with the ideas of Klimov (1973), Gamkrelidze and Ivanov (1995), Lehmann (1989), Bauer (2001), Barðdal and Eythórsson (2009).

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# The Typological Status of the Alignment System in Proto-Indo-European

- 700 Dative subject predicates in Modern Icelandic
- 200 Accusative subject predicates in Modern Icelandic
- 15 Genitive subject predicates in Modern Icelandic
- Would Modern Icelandic be classified as an accusative language if it had been discovered today?

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# Conclusions (1)

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- The current investigation shows that argument structure constructions with different case frames are different form-function correspondences
- The semantics of the Dative subject construction in German and Faroese is a proper subset of the semantics of the construction in Icelandic.
- Our comparison of Latin and Greek reveals that the argument structure constructions there are a proper subset of the argument structure constructions in Germanic
- Lithuanian and Russian exhibit an additional Dat-Acc construction which may be a later innovation

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# Conclusions (2)



- The absence of certain possible argument structure constructions in the languages under investigation is systematic, suggesting historical relatedness
- A further investigation is needed to map argument structure constructions in more IE languages
- It is clear, however, that systematic correspondences of argument structure constructions occur across the early and archaic Indo-European languages, i.e. Germanic, Latin, Greek, Lithuanian and Slavic (Russian)
- Hence, our preliminary conclusion is that at least some of the non-canonical case and argument structure constructions can be reconstructed for

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