The history of Indo-European languages: alignment change as a clue

Toyota, Junichi

Published in:
Early European Languages in the Eyes of Modern Linguistics

2009

Loudová, Kateřina & Marie Žáková (eds.) 2009. Early European Languages in the eyes of Modern Linguistics. Brno: Masaryk University.

The History of Indo-European Languages: Alignment Change as a Clue

Junichi Toyota (Lund)

1. Introduction

In this paper, variations of grammatical structures among Indo-European (henceforth IE) languages are studied diachronically. The analysis focuses on a specific feature, known as alignment and its change over the past ca. 6,000 years. Although it has not been studied much previously with respect to IE languages, historical changes of alignment can reveal some fundamental differences among these languages, especially when the analysis includes the reconstructed mother language, i.e. Proto-Indo-European (henceforth PIE).

The analysis begins with a review of trends in the historical linguistics of IE languages, pointing out a missing link within previous works. The rest of the paper is focused on alignment, starting with the author's definition. Then, alignment is described in detail: historically, transitivity plays an important role and some specific features that help us to identify different stages of the changes are also illustrated. Finally, an overall picture of the developmental path found in different IE languages is given.

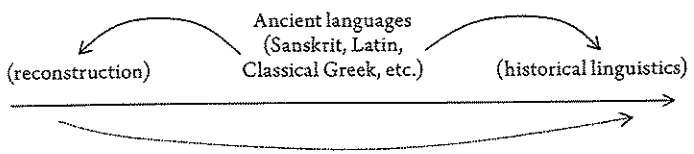
2. Language change within IE languages

Historical linguistics has been active for at least several decades and offered much insight into studies concerning human language. When looking at historical linguistics *per se*, this discipline has two different sub-disciplines. One concerns the reconstruction of earlier languages based on evidence found in historical documents. The other is the analysis of historical development based on earlier written records. This relationship is shown in Figure 1. Essentially, historical linguistics is based on the Ancient languages, and depending on whether one moves forwards or backwards in time, different disciplines are created.

What is often neglected in historical linguistic research is the connection between these two disciplines. Analysis of Ancient languages, for example, is normally carried out without referring to reconstructed languages and the grammars of modern languages are studied in reference to their mother languages according to written records. In the case of IE languages, for instance,

the reconstructed mother language, PIE, is not taken into consideration. Thus, it appears that the two sub-disciplines are somehow split into two unrelated parts. The connection of these parts, represented as a dotted line in Figure 1, can reveal interesting historical links that have been overlooked in recent linguistic analyses. This paper endeavours to discuss these links concerning alignment changes.

Figure 1: Schematic representation of previous research on historical linguistics

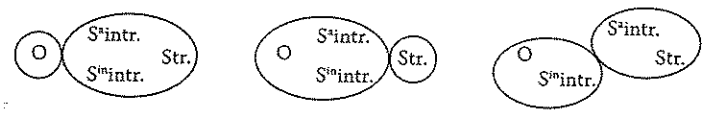


3. Alignment

The term 'alignment' means the way a language treats a subject and an object grammatically in terms of the distribution of morphological markers or of syntactic, semantic or morphological characteristics. These different systems can be roughly classified into three units. The most commonly-known classifications of alignment are nominative-accusative alignment (henceforth *accusative alignment*) or absolutive-ergative alignment (henceforth *ergative alignment*). The difference between these alignment types is that the subject in transitive and intransitive constructions is treated identically in accusative alignment while the subject of intransitive constructions and the direct object of transitive constructions are identical in ergative alignment. Another alignment type, known as active-stative alignment (henceforth *active alignment*) is based on the separation of intransitive subjects into two groups: the active-cum-pseudo-transitive subject and the stative/inactive--cum-transitive object.

Although it may not be clear what these alignment types mean if they are explained only verbally, they can be clarified according to their relationships as schematically represented in Figure 2 and through examples in (1) to (3). English has an accusative alignment, and speakers of IE languages are familiar with the accusative alignment as in (1). As for the ergative and active alignments, hypothetical English examples are used. Notice the use of pronouns *I* and *me* in (2) and (3). Previous studies on alignment concerning IE languages are not common except, for instance, Aronson (1977) and Toyota (2005).

Figure 2: Schematic representation of alignment system



Keys: Str. = transitive subject; O = transitive object; S^aintr. = active/dynamic intransitive subject; S^{in}intr. = inactive/stative intransitive subject

(1) Accusative alignment
a. *I punched him in the stomach.* (Transitive)
b. *He punched me in the stomach.* (Transitive)
c. *I run.* (Intransitive)

(2) Ergative alignment
a. *I punched him in the stomach.* (Transitive)
b. *He punched me in the stomach.* (Transitive)
c. *Me run.* (Intransitive)

(3) Active alignment
a. *I punched him in the stomach.* (Transitive)
b. *He punched me in the stomach.* (Transitive)
c. *I run.* (Dynamic intransitive)
d. *Me stay.* (Stative intransitive)

All of the modern IE languages have accusative alignment. Historically, however, these languages once had active alignment. A number of reconstruction works on earlier IE languages claim that an ancestral language of modern IE languages, Proto-Indo-European, had active alignment.[1] As far as the written records are concerned, IE languages consistently demonstrate the accusative alignment pattern, and the alignment change in IE languages is considered to be from an active to an accusative alignment. Note, however, that there is a partial ergative alignment in some IE languages known as split-ergativity. The type found in Celtic and Indo-Aryan languages is based on tense-aspect:[2] the perfective aspect expressed in Celtic and Indo-Aryan languages has to use the undergoer-orientation by default as demonstrated in (4) from Irish. The lack of a construction with the actor-orientation makes this structure look superficially like the passive voice in other IE languages; however, this should be interpreted as an active construction with

1 Gamkrelidze & Ivanov (1995); Szemerényi (1996); Lehmann (2002).
2 Dixon (1994: 97–101).

a different alignment system. This type of construction often occurs when historical changes leave gaps in the verbal paradigm of the language in question.[3]

(4) Irish

tá	*mac léinn*	*seo*	*molta*	*again*
is	student	this	praised	at.us

'We have praised this student.'

4. Emergence of transitivity

Alignment change from active to accusative is a change from an aspect--oriented grammar to a transitivity-oriented one. Active alignment organises a grammar based on perfective-imperfective aspectual distinction. Still, a speaker can express causer-causee relationships. However, whether an action has been terminated or not has priority over 'who does what to whom'. When transitivity emerged, the speaker's concern shifted to energy transfer, and the causer-causee relationship gained more prominence in grammatical organisation. Grammar of Ancient recorded languages often shows an earlier sign of a causer-causee relationship, realised in the grammatical voice as the active-middle dichotomy, where the active expresses the presence of a causer-causee relationship and the middle, the lack of it.[4] Judging by this, the alignment change must have occurred before the recorded history of IE languages approximately 4,000–5,000 years ago.

Energy transfer, i.e. transitivity, was realised earlier semantically, and later became more syntactically expressed. The semantically-oriented transitivity is in principle subjective, which allows subtle differences to be expressed based on a speaker's viewpoint, and the syntactically-oriented transitivity is objective, with details of personal views not being encoded in this type. The first type is labelled here as *semantic transitivity* and the latter, *syntactic transitivity*. This distinction is useful in discussing the historical development of IE languages, since different languages are at different stages of transition from semantic to syntactic transitivity.

A characteristic of semantic transitivity is that speakers can express the transfer of energy in gradience, and there can be an intermediate stage, i.e. some sentences are more transitive than others and some ambiguous cases can be found.[5] It is often the case that perception involves ambiguous cases of energy transfer, and structures involving perception are often syntactically

3 Toyota & Mustafović (2006: 191–212).

4 Gamkrelidze & Ivanov (1995).

5 Hopper & Thompson (1980: 251–339); Taylor (2003: 222–246).

marked. One such example is the lack of nominative subject as found in Old English, e.g. (5), where the NP, marked as genitive, functions as a cause and the NP in dative as a recipient of cause. This example does not contain any NP in the nominative case, but it was fully grammatical earlier. Another case involves the different case marking on the direct object: the direct object marked as dative normally refers to the action, and the object with accusative expresses resulting state of action.[6] Thus (6a) places emphasis on the resulting state of action, while (6b) places emphasis on the action. Comparing these two cases, accusative denotes a higher degree of energy transfer since the transfer is considered complete. Dative, on the other hand, refers to a lesser degree of transfer since the transfer is still ongoing and the object is not yet completely affected. These instances are largely made possible with case markings, and languages with semantic transitivity often preserve the case.

Syntactic transitivity is, on the other hand, purely concerned with the presence or absence of a direct object. When it is present, a clause is transitive, and when absent, intransitive. In this type, every structure, even those including perception verbs, is uniformly constructed. The grammatical subject tends to be human due to the anthropocentric nature of human language in unmarked constructions, which makes structures in English *I like cakes* possible (cf. (5)). In addition, syntactic transitivity is mainly concerned with the transfer itself and the manner of transfer, i.e. whether it happens intentionally or spontaneously is not significant.

(5) Old English

mæg	*þæs*	*þonne*	*oferþyncan*	*ðeodne*	*Heaðobeardna*
may	that.GEN	then	displease.INF	lord.DAT	Heathobards.GEN

'It may displease the lord of the Heathobards.'
(*Beowulf* 2032) [GEN-V-DAT]

(6) Latin

a. *ego* *moderor* *equum* *meum*
I.NOM moderate.PRS.1SG horse.ACC my.ACC
'I control my horse.' (resulting state)

b. *ego* *moderor* *orationi* *meae*
I.NOM moderate.PRS.1SG speech.DAT my.DAT
'I moderate my speech.' (action itself)

6 Lass (1994: 229–230, 238).

5. Keys to identify different stages in changes

There are several grammatical features that help us to identify different stages of the transition from semantic to syntactic transitivity. The first feature is the grammatical voice, in particular the middle and the passive voice. The passive requires a high degree of energy transfer by default, since "the more transitive a clause is, the more readily it can be passivised".[7] This is easier to understand in passivising divalent verbs (verbs with a direct object), but some languages allow the passivisation of monovalent verbs (verbs without a direct object, e.g. (7) and (8)). This structure is somewhat odd from an Anglocentric view, but these clauses are semantically transitive on their own, according to the parameters proposed by Hopper & Thompson or Taylor.[8] Examples such as (7) and (8) are not possible in languages with syntactic transitivity, but this transitivity instead allows the passivisation of semantically intransitive verbs, mainly perception verbs, when the direct object is present, e.g. English *This book was liked by many children* from *Many children liked this book*. In other words, cases like (9) from Frisian illustrate that languages with semantic transitivity cannot accept the passivisation of perception verbs. The middle voice prototypically refers to spontaneous events, and is not transitive by nature, but since the manner of energy transfer is not significant in syntactic transitivity, the middle voice is not often used in the syntactic transitivity. This explains why the passive voice is often found, but not the middle voice, in languages like English.

(7) German
es *wird* *getanzt*
it become.PST dance.PST.PRT
'There was dancing.' (lit. 'it became danced')

(8) Dutch
er *wordt* *(door* *de* *jongens)* *gefloten*
it become.PRS through the young.PL whistle.PST.PRT
'There is whistling (by the boys).'

(9) Frisian (Tiersma 1985: 111)
**hjir* *wurdt* *wakker* *miend*
here become.PRS much think.PST.PRT
'Much thinking is done here.'

7 Kittilä (2002: 23).
8 Arnett (2004).

Another feature is perception verbs. In a number of IE languages, so-called impersonal verbs are used to refer to perception. What is unique in this construction is that the experiencer is expressed in the dative or oblique case and the outer stimulus commonly in the nominative or genitive case (e.g. in (10) and (11)). In this case, the energy transfer is expressed in a spatial sense, setting the experiencer as the goal of energy transfer by default. In some languages, this construction was altered due to the anthropocentric nature of language, i.e. the grammatical subject tends to be human as demonstrated in the English translation for (10). This change made perception verbs look like other divalent structures. Since the use of different case marking allows speakers to express varying degrees of energy transfer, impersonal verb construction was suited to languages with semantic transitivity. Once syntactic transitivity emerged, the number of arguments became more crucial to the construction. Thus, languages with many impersonal verbs are still more likely to be based on semantic transitivity. This also means that languages without impersonal verbs such as English are heavily dependent on syntactic transitivity.

(10) Spanish
me *gusta* *la* *yucca*
I.OBL taste the manioc
'I like manioc.' (lit. 'to me the manioc tastes')

(11) Latvian
kam *niez*
who.DAT itch
'Who itches.' (lit. 'to whom itches')

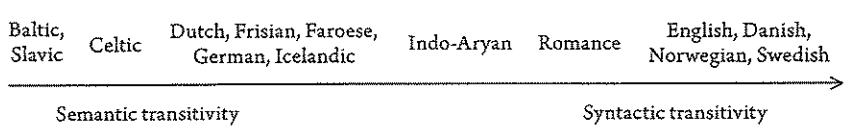
By comparing these features, it is possible to identify different stages of development from semantic transitivity to the syntactic one. Generally speaking, English, Scandinavian languages and Romance languages have developed into syntactic transitivity (or there are, at least, more definite signs of development), but other languages are still heavily reliant on semantic transitivity.

6. Current state of IE languages

As hinted at in the previous section, some features can allow us to determine varying stages of alignment change. All modern IE languages have accusative alignment, but integration of transitivity into their grammatical systems varies significantly, as shown in Figure 3. Most language families

are grouped together except the Germanic languages, since the diversity is too wide for them to be classified as a single group. Nevertheless, some languages such as English have developed substantially and their transitivity has become largely syntactically-oriented. On the other hand, Baltic and Slavic languages have still preserved much of their archaic structures, although their alignment has turned into the accusative one. This is a good example illustrating that historical change is a gradual process, and judging from the unidirectionality of grammaticalisation, it is predicted that Baltic and Slavic languages will, sometime in the distant future, change into syntactic transitivity as found in languages such as English.

Figure 3: Schematic representation of different degrees of alignment change



7. Summary

In this paper, it is claimed that variations in grammatical structure among IE languages can be explained in terms of diachronic changes in alignment from their ancestral language, PIE. The general change is from active to accusative alignment and variations are due to the fact that each language is located at different stages in change, especially creating transitivity from semantic to syntactic one (Figure 3). IE languages have not been the major focus in studies in terms of alignment changes, and further analysis along this line of argument can reveal more interesting points in future research.

References

Arnett, C., *A Cognitive Approach to the Semantics of the German Passive*, New York 2004.

Aronson, H., English as an active language, *Lingua* 41, 1977, 201–216.

Dixon, R. M. W., *Ergativity*, Cambridge 1994.

Gamkrelidze, T. V. & Ivanov, V. V., *Indo-European and Indo-Europeans: a reconstruction and historical analysis of a proto-language and proto-culture*, 1. *The text* (English version by J. Nichols), Berlin 1995.

Hopper, P. J. & Thompson, S. A., Transitivity in Grammar and Discourse, *Language* 56, 1980, 251–339.

Kittilä, S., *Transitivity: Towards a Comprehensive Typology*, Turku 2002.

Lass, R., *Old English: a historical linguistic companion*, Cambridge 1994.

Lehmann, W. P., Pre-Indo-European, *Journal of Indo-European Studies Monograph* 41, 2002.

Szemerényi, O. J. L., *Introduction to Indo-European Linguistics*, Oxford 1996.

Taylor, J., *Linguistic Categorization*, Oxford 2003.

Tiersma, P. M., *Frisian Reference Grammar*, Dordrecht 1985.

Toyota, J., Old English as a language with active alignment: evidence from word order, in: *Papers from the 20th Scandinavian Conference of Linguistics*, F. Karlsson (ed.), Helsinki 2005, 1–18.

Toyota, J. & Mustafović, M., Grammatical Voice and Tense-Aspect in Slavic, in: *Passivization and Typology*, A. Werner – L. Leisiö (eds.), Amsterdam 2006, 191–212.

Abstract

In this paper, the history of IE languages is studied in terms of alignment change. What is significant in this change is the emergence of transitivity as a basic grammatical operational system. However, there are varying degrees of transition to transitivity-based system, especially between semantic and syntactic transitivity. It is argued that these degrees of transition create differences in grammatical structures among IE languages.