Passive as an indicator of alignment change in terms of transitivity

Junichi Toyota

Lund University / University of Belgrade

1. Introduction

In this paper, a relationship between the passive voice and the rest of the grammatical structures in the Germanic languages is discussed, particularly focusing on alignment. Due to the change of alignment from Proto-Indo-European (PIE) to the modern Indo-European (IE) languages, the basic organisation of the grammar has shifted from an aspect-based alignment system to a transitivity-based one. Surprisingly, it has not often been elucidated, but this change has had a significant impact on the grammatical voice system, especially concerning the middle and the passive voice. This shift is still ongoing, in fact, and varying degrees of historical development can still be observed in modern IE languages. Furthermore, the passive voice plays an important role as an indicator of the degree of shift. This is later illustrated using the passive voice in Germanic languages.

This paper is organised as follows: the alignment change is first illustrated, starting from PIE and progressing to modern IE languages. Then, the impact of shift in alignment on grammatical voice is discussed, including the history of grammatical voice in IE languages. Finally, the passive voice is used to illustrate how varying degrees of a shift in alignment is related to the grammatical voice system.

2. Alignment change in Indo-European languages

Alignment has been studied in typological works (Nichols 1992; Dixon 1994; Harris and Campbell 1995) or language-specific cases (Kartvelian or Amerind languages, e.g. Munro and Gordon 1982; Harris 1990; Hewitt 1995). Alignment is any one of several grammatical systems for classifying noun phrase arguments in the sentences of a language, i.e. the pattern of treatment of subjects and direct objects, referring to the distribution of morphological markers or of syntactic, semantic or morphological characteristics. IE languages are not often analysed in this respect, but reconstruction works on IE languages claim that PIE had active alignment as argued in Klimov (1974, 1977), Szemerenyi (1980), Lehmann (1989; 1993: 213–217; 2002), Gamkrelidze and Ivanov (1995: 233–276), Drinka (1999), Clackson (2007), Donohue (2008). This alignment changed into an accusative one as PIE evolved into its daughter languages. The degree of change varies from language to language, but surprisingly traces of earlier PIE and its active alignment can be found even in modern IE languages, and one such case involves the grammatical voice system and transitivity.

The most crucial shift concerning alignment change is in the different basic operational systems. Verbs in active alignment only express differences in aspect between stative and dynamic, not in tense (Gamkrelidze and Ivanov 1995: 254–267). In other words, the basic organising system in PIE is the aspectual difference, i.e. stative or dynamic. This is reflected in the nominal distinction that active nouns refer to entities that can act on their own, and are commonly considered dynamic while inactive nouns, representing entities which cannot act on their own, are treated as stative. The verb also corresponds to these nominal forms and there are both active and inactive forms. In some cases, the same event can be considered both active and inactive, which is expressed by different verb stems. In the following examples the first instance is thus inactive, and the second, active, e.g. PIE **es*– 'be'/**bʰuH*– 'be'; **ses*– 'lie, sleep'/**kʰei*– 'lie'; **stʰ–aH*– 'stand'/**or*– 'stand'; **es*– 'sit'/**set*'– 'sit', etc.

Changes to transitivity occurred between PIE, where no distinction was made between transitive and intransitive, and IE languages where such a distinction exists. Essentially, various changes concerning alignment seem, somehow, to be related to the shift of the basic operational system in grammar from an aspect-based one to a transitivity-based one. It is even possible to claim that a major part in the history of IE languages can be considered to have been spent on the development of transitivity. Transitivity is broadly defined as a transfer of energy from actor to undergoer. However, there seem to be two different sub-types of transitivity, semantic and syntactic transitivity (cf. Toyota 2009; in prep.). Semantic transitivity assumes the transfer along a gradient. The transfer can be high, low or even intermediate, i.e. some sentences are more transitive than others, and some ambiguous cases can be found. When it comes to syntactic transitivity, there is less uncertainty since one can tell whether a sentence is transitive or not because of the presence or absence of a direct object.

From an Anglocentric perspective, syntactic transitivity corresponds to a conventional distinction. However, scholars such as Hopper and Thompson (1980) or Taylor (2003: 222–246) clearly demonstrate that a conventional distinction between transitive and intransitive verbs found in English may not hold true in other languages. According to their definition based on several parameters, *He left* can be more transitive than *I like cakes*. As demonstrated in Table 1, *He left* scores more high-value parameters (seven in total) than *I like cakes* does (two in total). This result suggests that English definitely uses syntactic transitivity, but this is a rather rare case even in the world languages. Some languages may indicate a tendency towards the syntactic transitivity, but the semantic transitivity is normally used as a basic operational system in many languages.

Table 1.   Parameters of transitivity for various examples

	She left.	*I like cakes.*	*He broke the window.*
a. Participants	-	+	+
b. Kinesis	+	-	+
c. Aspect	+	-	+
d. Punctuality	+	-	+
e. Volitionality	+	-	+
f. Affirmative	+	+	+
g. Mode	+	+	+

h. Agency	+	-	+
i. Affected of object	-	-	+
j. Individuation of object	-	-	+

Keys: + = parameter high; - = parameter low

This type of untidy distinction is the result of historical development. In terms of aspectual distinction, the semantic distinction first emerged, expressing the energy transfer with a metaphorical extension of spatial expression. The earlier accusative marking, for instance, is believed to have been derived form the PIE allative marker (Martinet 1962: 153; Kuryłowicz 1964: 181). This suggests that the energy transfer was earlier considered as a movement of energy from actor to undergoer. In addition, a number of verbs can take different case markings for the direct object according to the degree to which they are affected. In (1) from OE, for instance, the verb *folgian* 'follow' can take both an accusative and a dative direct object, the former indicating the action of following itself and the latter, the resulting state of following. Such a difference is only achievable in semantic transitivity, signalling that OE used semantic transitivity. As clarified later in Section 4, PDE has a syntactic transitivity which is in sharp contrast to earlier grammatical structures hinted at by examples like (1). Thus, the development of transitivity is a gradual process, and syntactic transitivity has to go through a stage of semantic transitivity.

(1)   Old English
    (a) *and   ða   folgode   feorhgeniðlan*
        and   then   follow.PST   deadly.foes.ACC
          'and then he pursued his deadly foes.' (*Beo* 2928)
    (b) *him   folgiað   fugöas   scyne*
        he.DAT   follow.PRS   bird.PL   fair
          'Fair birds shall follow him.' (*WHom* 11.197)

3. Grammatical voice and alignment changes

Various constructions are affected by alignment change, and grammatical voice is one of them. At the initial stage of active alignment, voice distinction was very poorly expressed. According to Klimov (1977: chap. 3, as summarised in Nichols 1992: 9-10), languages which display active alignment are considered to possess no voice opposition. Instead, there can be an opposition of what is called *version* in Kartvelian studies (roughly, active *vs.* middle in the terminology of Benveniste 1966, or an opposition of normal valence *vs.* valence augmented by a second or indirect object, or an opposition of speech–act participant vs. non-participant in indirect object marking on the verb). However, a later stage of PIE started to develop an active–middle distinction, thus creating a binary opposition in the grammatical voice system.

As introduced earlier, PIE had an active-inactive opposition for nouns and verbs, and particularly in the case of verbs, with a specific form known as the *m(i)*–series (active) and the *Ha*–series (inactive) named after specific markers for the first-person for each type. The monovalent *Ha*-series is an important innovation in PIE since it allows the middle voice construction to emerge (Gamkrelidze and Ivanov

1995: 260–261). The *Ha*-series involves inactive nouns (see Table 2) used to express the state of the subject. The use of an inactive subject created another option in the grammatical voice, expressing action of inactive nouns on or for itself. This is considered to be the origin of the Indo–European Middle voice often referred to for spontaneous events in daughter languages, and it is clearly a residual effect of earlier inactive nouns. A binary voice system is created involving the active and the middle voice. The verbal suffix for the earliest IE middle is: 1SG *$-Hai$, 2SG *$-t^hHai$, 3SG *$-ei$, which are often well preserved: Hittite *ešh⊙ah⊙ari* 'I sit down' (2SG, *eštari*; 3SG, *ešari/eša*); *arh⊙ah⊙ari* 'I stand' (2SG *artati/artari*; 3SG *artari/arta*); Sanskrit *bruv-é* 'I speak'; Old Church Slavonic *věd-ě* 'I know'; Latin *meminī* < **memenai* 'I remember'; Slavic *mĭni(tŭ)* 'thinks'; Lithuanian *mìni* 'thinks'.

Table 2.   Full paradigm of monovalent *Ha*-series

	Actor		Predicate
1SG	Inactive	—	V-*Ha*
2SG	Inactive	—	V-*t^hHa*
3SG	Inactive	—	V-*e*

Historically, voice distinction was a binary (active–middle) opposition, but it often developed into a ternary (active–middle–passive) system or sometimes into a new binary (active–passive) system, with the passive replacing the earlier middle in modern IE languages. What is clear is that the development of the passive took place much later, circa 1500 AD in many IE languages. The middle voice, expressing spontaneous events, has survived in some languages (e.g. Slavic) because these languages are still using archaic semantic transitivity. The only adequate way to deal with the finer details of energy transfer regardless of the presence or absence of the direct object is through some form of semantic definition. In other words, syntactic transitivity is not designed to express fine details in energy transfer such as spontaneity. Thus, the shift of alignment can be seen from two changes in the grammatical voice, i.e. the disappearance of the middle voice denoting spontaneous events and the emergence of the passive voice. Differences in alignment change may be easier to observe by comparing languages from different family trees as these tends to be generically stable (Nichols 1992: 10–11), but it is still possible to find gradience of distinction caused by historical changes within a single language family, such as Germanic languages.

4. Passive as an indicator of alignment change

A higher degree of energy transfer is closely connected to the passive voice. For instance, when a lexical verb is highly transitive (both semantically and syntactically), such as a verb of creation or destruction, passivisation is more easily achieved. Kittilä (2002: 23) rightly points out this correlation of the passive and transitivity as follows:

> Passivization makes it in many (but not all) cases possible to separate transitive clauses from less transitive ones, since […] only clauses conceived of as somehow transitive are to be passivized in many languages. The acceptability of passivization correlates to some extent with

transitivity: the more transitive a clause is, the more readily it can be passivised.

Accordingly, this makes the passivisation of perception verbs difficult since transitivity is not so high in such a construction because of the spontaneity of the event and the lack of volition on the part of the actor. In PDE, perception verbs readily accept passivisation although some instances still create a contextual anomaly, e.g. ?*This book is liked by him*. However, such verbs in PDE are much more easily passivisable than cognate forms in other Germanic languages, where perceptions are often expressed in the reflexive/middle structure by reflexive pronouns. This is a sign that perception verbs are inherently and semantically very low in energy transfer. An example from Frisian in (2) illustrates a case of ungrammatical passivisation with perception verbs. The presence of the direct object has become a condition for passivisation in English, but that is not necessarily the case in other languages. This can be considered as a clear sign that syntactic transitivity has emerged in English.

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

Languages with semantic transitivity still have constructions like impersonal passive with monovalent verbs, e.g. (3) to (5). This is possible since monovalent verbs such as 'dance', 'whistle', etc. are highly agentive although there is no direct object (cf. Table 1). See also Arnett (2004) for similar analysis focusing on German. Those languages with highly syntactic transitivity, like English, do not allow the passivisation of monovalent verbs regardless of semantic features such as agentivity simply because of the absence of a direct object.

(3)   German
         Es   wird   getanzt
         it   become.PST   dance.PST.PRT
         'There was dancing' (lit. 'it became danced')

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

(5)   Icelandic (Thráinsson 1994: 179)
         Það   hefur   áreiðanlega   verið
         there   have.PRS.3SG   certainly   be.PST.PRT
         dansað   þá
         dance.PST.PRT.NOM.SG.NEUT   then
         'There has certainly been dancing.' (lit. 'there has certainly been danced')

In addition, languages with syntactic transitivity often develop another type of passive, such as the so-called 'get'–passive. This type is often historically related to the causative, which is inherently highly transitive, marked syntactically by a valency increasing operation (Toyota 2007; 2008: 148-184). There are normally structural restrictions for this type of construction: for instance, verbs used in this structure have to be ditransitive, and only the indirect object can be the subject of the passive. See Toyota (this volume) for examples in Dutch and Norwegian. This case is similar to the passivisation of perception verbs in English in a sense that a specific structure, i.e. the presence of an indirect object, makes passivisation of a clause possible. In the case of English, however, the *get*–passive can also passivise transitive clauses without indirect objects, but it seems necessary that the passive clause be semantically transitive, i.e. semantic conditions cannot be totally overruled by structural requirements such as the presence of a direct object in this case. So examples like (6b) can cause a semantic anomaly.

(6)   (a)   *This film is liked by many people in this town.*
       (b)   **This film gets liked by many people in this town.*

As in the case of active voice expressing different degrees of energy transfer according to case marking, the passive can be constructed with different subject cases. Faroese, for instance, allows different case markings on the subject NP and both the original case markings on the direct object or the nominative can be used. Example (7b) illustrates a case where the original dative case is changed into the nominative case, while in (8b), the original dative case is preserved. Icelandic, on the other hand, does not allow such a degree of flexibility and the original case is obligatorily preserved with certain verbs such as *hjálpa* 'help'. (9b) must therefore have the grammatical subject in the dative case. These languages still take advantage of subtle differences expressed by different cases, thus indicating that their transitivity is semantically–oriented. In order for languages to operate on semantic transitivity, case marking is required, and most modern Germanic languages cannot do this. Historically, however, all Germanic languages went through a stage of flexible case markings, such as those found in modern Faroese and Icelandic.

(7)   Faroese (Barnes and Weyhe 1994: 213)
       (a)   *Tey   hjálptu   honum*
             they   help.PST   he.DAT
             'They helped him.'
       (b)   *Hann   varð   hjálptur*
             he.NOM   become.PST   help.PST.PRT
             'He was helped.'

(8)   Faroese (Barnes and Weyhe 1994: 213)
       (a)   *Tey   ynsktu   honum   eina   góða   ferð*
             they   wish.PST   he.DAT   a   good   journey
             'They wished him a good journey.'
       (b)   *Honum   varð   ynskt   eina   goða   ferð*
             he.DAT   become.PST   wish.PST.PRT a   good   journey

'He was wished a good journey.'

(9)   Icelandic (Thráinsson 1994: 177)
    (a) *Einhrer   hjálpaði   strákunum   með   heimaverkefnið*
         somebody.NOM help.PST   boys.DAT.PL with   homework
         'Somebody helped the boys with the homework.'
    (b) *Strákunum   var   hjálpað   með*
         boys.DAT.PL be.PST.SG   help.PST.PRT.NOM.SG.NEUT with
         heimaverkefnið
         homework
         'The boys were helped with the homework.'

These examples so far assume that an overt subject NP is required in the passive, regardless of their case markings. Historically, however, the presence of the subject was not compulsory and the slot where one would expect a subject NP to be in modern languages could be left empty. Examples in (10) to (12) illustrate such cases from earlier languages, and this is also the case for modern Icelandic, e.g. (13b). In languages with sensitivity to syntactic transitivity, so-called dummy subjects such as 'it' and 'there' are used just to fulfil the syntactic requirement. This is useful when the verb is monovalent as in (3) to (5) because there is no argument to fill in the subject slot after demotion of the monovalent active subject. Note, however, that divalent verbs can be also used with dummy subjects as shown in (14) from Frisian. The use of a dummy subject in the passivisation of monovalent verbs may sound contradictory because the passivisation of monovalent verbs is a semantic feature, but the use of a dummy subject is a syntactic feature. This type of combination is an unavoidable part of historical change, forming the gradient nature of human language. See Table 4 for patterns of different combinations.

(10)   Old English
    Is   sæd   þæt   se   cining   wære   efenblissiende
    is   said   that   the   king   was   blessed
    'It is said that the king was blessed.' (Ælfred, *Bede* (Sch.) 59, 4)

(11)   Middle Dutch (van der Wal and Quak 1994: 84)
    Menichwerff wart   dair   gecust
    frequently   become.PST there   kiss.PST.PRT
    'Frequently kissing was done there.'

(12)   Old Scandinavian (Faarlund 1994: 62)
    Lesit   er   á   bókum
    read.PST.PRT   be.PRS.3SG   in   book.PL
    'One reads in books.' (lit. 'read is in books')

(13)   Icelandic (Thráinsson 1994: 179)
    (a) *Margir   hafa   áreiðanlega dansað   þá*
         many.NOM has.PRS.3PL certainly   dance.PST.PRT then
         'Many have certainly danced then.'

(b) *Þá   hefur   áreiðanlega verið*
    then   have.PRS.3SG   certainly   be.PST.PRT
    dansað
    dance.PST.PRT.NOM.SG.NEUT
    'There has certainly been dancing.' (lit. 'then has (*there) certainly been danced.')

(14)   Frisian (Tiersma 1985: 111)
    Der   waarden   twa   minsken   troch   de   soldaten
    there   become.PST   two   people   through   the   soldier
    deasketten
    shot.to.death.PST.PRT
    'There were two people shot to death by the soldiers.'

Another important feature is the actor marker. It historically involves a preposition lexically indicating the source, e.g. 'of' or 'from' (see Table 3). Most East Germanic languages preserve this system except some (West Germanic) where other prepositions have replaced the one indicating source, e.g. English *by*, Dutch *door* 'though', Frisian *troch* 'through' and German *durch* 'through'. 'Of' is often used to represent semantic transitivity since the actor is considered a source of external cause, and it is expressed more semantically as a metaphorical extension of spatial sense. Like the case marking which influences the degree of energy transfer, the use of 'of' or 'from' clearly indicates the transfer. This is a sign that these languages still use semantic transitivity since they have to express the energy transfer overtly, not structurally, through the choice of a certain lexical item. It is also, typologically, the most common pattern to express an actor in the passive. Languages like English show a totally different pattern, and these languages often have a much more developed syntactic transitivity system, although it must be noted that *of* was the most common choice for an actor marker earlier until ca. 16 to 17th century (see Toyota 2003). This is so because the languages under consideration do not rely on lexical meaning to express energy transfer since the passive structure automatically signals that there is a high degree of energy transfer.

Table 3.   Choice of preposition in historical context

	Modern		Historical	
		Preposition		Preposition
NORTH	Danish	*af* 'of'	Old Scandinavian	*av* 'of'
	Faroese	*av* 'of'	Old Norse	*av* 'of'
	Icelandic	*af* 'of, from'		
	Norwegian	*av* 'of'		
	Swedish	*av* 'of'		
EAST			Gothic	*fram* 'from'
WEST	Dutch	*door* 'through'	Old/Middle Dutch	*van* 'from
	English	*By*	Old/Middle English	*of*
	Frisian	*fon* 'from', *troch* 'though'	Old/Middle Frisian	*fon* 'from'
	German	*von* 'from', *durch* 'through'	Old/Middle High/Low German	*fon* 'from'
			Old Saxon	*fon* 'from'

Table 4 summarises key indicators of transitivity in the passive construction in Germanic languages. It is obvious that English has a highly syntactic transitivity by possessing all the features. Other languages such as Norwegian, Swedish, Danish and Dutch can be considered as having become more syntax–oriented with a different mixture of features, but some of them combine semantic and syntactic transitivity. For instance, Dutch has an impersonal passive as in (4), but a *get*–passive too. Icelandic and Faroese, on the other hand, seem to have preserved earlier semantic transitivity, and they are not so structure–oriented in forming the passive voice. In addition to these features, the characteristics of the passive also correspond to other grammatical features such as the presence/absence of case markings and an obligatory dummy subject in some active structures such as weather verbs, etc. Thus, the passive voice can be studied in relation to other grammatical constructions.

Table 4.   Key features in the passive voice as indicator of transitivity

	Monovalent verbs prohibited in impersonal passive	*Get*-passive	Non-source domain as actor marker	Perception verbs	Dummy subject
Danish	√			(√)	√
Faroese	(√)			(√)	
Icelandic					
Norwegian	√	(√)		(√)	√
Swedish	√			(√)	√
Dutch		(√)	√		√
English	√	√	√	√	√
Frisian	√				√
German			(√)		√

Note: ( ) structure possible under specific conditions.

These instances demonstrate that alignment change concerning transitivity is a gradual process and even within the Germanic languages, different stages in the development can be observed. English seems to have developed the most, and its transitivity is highly syntactic. Other languages, however, are somewhat ambiguous

and they may be better considered at an intermediate stage, except for Icelandic and Faroese, in which transitivity is highly semantically-oriented. In order to determine different stages in such a gradual process, the analysis of the passive voice is useful, and features in Table 4 also correspond to general alignment changes (see Toyota in prep. for details)

5. Summary

This paper offers a discussion of the relationship between transitivity and the passive voice. It is a well–known fact that an inherently transitive clause can be passivised more easily, and this fact can be taken into account when analysing the diversity of grammatical structures among Germanic languages.

Interpretation of the transitive clause seems to differ from language to language and transitivity can be interpreted in at least two different ways: one based on semantic features, and the other, on syntactic features; for example, the direct object is required for a clause to be fully transitive. Once this fact is analysed from an evolutionary perspective, the semantic–based transitivity is older than its syntactic counterpart. Earlier human language was not concerned with transitivity, but with a perfective–imperfective aspectual distinction. This change can be summarised in terms of alignment change as a shift from active to accusative alignment. In other words, active alignment does not accommodate the passive voice, but accusative alignment does. However, alignment change is a very gradual process and even within the Germanic languages, one can find varying degrees of changes, as illustrated here by the passive voice.

Chronologically older semantic transitivity can take advantage of case markings in order to create different degrees of transfer such as marking the direct object with accusative, dative or locative case, as shown for O.E. in (1). This kind of subtle differences cannot be expressed by means of syntactic transitivity. The transitivity type in PDE is indeed a syntactic type, and this can be verified in the passive voice. For instance, perception verbs can be passivised in PDE although some instances still generate a contextual anomaly, e.g. ?*This book is liked by him*. However, these verbs are much more readily passivisable than those in other Germanic languages because of the presence of the direct object. This can also be considered as a sign that syntactic transitivity has emerged in English.

The passive has been studied here as a special construction, but it has not been analysed in relation to the general development of languages. Because of its special semantic and syntactic characteristics, the passive can be a useful indicator of changes such as alignment.

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Junichi Toyota
Lund University / University of Belgrade
Junichi.Toyota@englund.lu.se