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**THE EVOLUTION OF THE TENSE-ASPECT SYSTEM IN HINDI/URDU:  
THE STATUS OF THE ERGATIVE ALIGNMENT**

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## Abstract

The paper deals with the diachrony of the past and perfect system in Indo-Aryan with special reference to Hindi/Urdu. Starting from the acknowledgement of ergativity as a typologically atypical feature among the family of Indo-European languages and as specific to the Western group of Indo-Aryan dialects, I first show that such an evolution has been central to the Romance languages too and that non ergative Indo-Aryan languages have not ignored the structure but at a certain point went further along the same historical logic as have Roman languages. I will then propose an analysis of the structure as a predication of localization similar to other stative predications (mainly with “dative” subjects) in Indo-Aryan, supporting this claim by an attempt of etymologic inquiry into the markers for “ergative” case in Indo-Aryan.

## Introduction

When George Grierson, in the full rise of language classification at the turn of the last century,<sup>1</sup> classified the languages of India, he defined for Indo-Aryan an inner circle supposedly closer to the original Aryan stock, characterized by the lack of conjugation in the past. This inner circle included Hindi/Urdu and Eastern Panjabi, which indeed exhibit no personal endings in the definite past, but only gender-number agreement, therefore pertaining more to the adjectival/nominal class for their morphology (*calâ*, go-MSG “went”, *kiyâ*, do-MSG “did”, *bola*, speak-MSG “spoke”). The “outer circle” in contrast, including Marathi, Gujarati, Bengali, Oriya, Assamese, shows personal endings in every verb tense, therefore has a “conjugation”, and should be sharply distinguished from the languages of the inner core, with intermediate languages arranged into a “middle circle” (Bhojpuri, Eastern Hindi).<sup>2</sup> What it means is that agreement only in gender-number, along with the ergative structure as we call it today, was supposed to be the mark of a truly authentic Indo-Aryan language. This theory was strongly criticized by Suniti Kumar Chatterji and later abandoned by Grierson, but it is still held that ergative Indo-Aryan languages (roughly speaking in the West) radically differ from non-ergative ones (in the East) and are extremely atypical within the wider Indo-European family. What is unique in fact is the modern development of a full fledged ergative structure out of the nominal predicates,<sup>3</sup> not the historical phase where participial predicates were used with instrumental agents, which in other languages got converted into a nominative structure. Both ergative and nominative patterns in Indo-European rather represent different stages of the same logic in renewing the system (section 2), both in the past and future (section 3). It will appear at the same time that the distinctiveness of the ergative alignment, at least in Indo-Aryan, does not consist in being an inverted mirror of the nominative alignment

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<sup>1</sup> Grierson is the author of the *Linguistic Survey of India* (11 vol.), which is still a reference. The work represents the first attempt to group the Munda and Mon-Khmer languages as a distinct family (still called Austric or Austro-Asiatic) just after Dravidian languages had been separated as the second distinct Indian family, the first one being the Indo-Aryan family, identified right after the famous discovery by William Jones in 1786 that Sanskrit and Latin-Greek were sister languages. The first scholar who gave a scientific and wide description of the Indo-European family was Franz Bopp. For the description of the scientific and ideological context of these elaborations and their far reaching consequences in language classification, see A. Montaut 2005.

<sup>2</sup> His description, also based on a few phonetic features, like the alternation *s/sh*, supposedly a radical difference between both circles, was in conformity with the then theory of the settlement of the Aryan tribes in India, said to have come from the North-West in “concentric waves”. The original, more ancient settlers occupied the nucleus around which circled those arrived later. Such a theory was no longer in fashion when the *Linguistic Survey of India* was completed. Moreover, the sharp critics of S.K. Chatterji modified Grierson’s final presentation of the Indo-Aryan family.

<sup>3</sup> Which also occurred in some Iranian languages, like Pashto.

since it rather patterns with other localizing predications well established in the global economy of the system such as the experiential dative alignment (section 4). At the same time I will try to explore the main paths of grammaticization of aspect, tense and modality, starting with the non past system, which helps understand the evolution of the past system (section 1).

The aim of the paper is threefold: sketching the broad lines of the historical evolution of verb forms in Indo-Aryan and specially Hindi/Urdu; inquiring into the categories of aspect, tense, mood and the way they grammaticize; inquiring into the nature of the ergative alignment, along with other non-nominative alignments.

## 1. The non-perfect system

### 1.1. Generalities

The present shape of the Hindi/Urdu (HU) verbal paradigm may strike one as very bizarre: as opposed to most languages which have an unmarked indicative present, the two unmarked forms are the subjunctive (only personal endings) and the anterior or narrative past (only gender-number endings), and the present is marked (two words, 5 morphs). See table 1:

Tense Aspect - accomplished	Tense Aspect + accomplished	Mood	Mood	Tense
	<i>calâ</i> preterit went	<i>caltâ</i> counterfactual would go	<i>calûn</i> subjunctive	<i>calûngâ</i> future
<i>caltâ hai</i> present goes ( <i>cal rahâ hai prog</i> ) is going	<i>calâ hai</i> perfect has gone			
<i>caltâ thâ</i> imperfect walked ( <i>cal rahâ thâ prog</i> ) was going	<i>calâ tha</i> pluperfect had gone			

If we agree that unmarkedness is used by default and expresses the core meaning of a given sector of the mental map,<sup>4</sup> whereas marked forms express marked, less basic and less frequent meanings, the picture looks strange because we are not used to conceive of anteriority as the basic (core) meaning in tense, nor subjunctive in mood.<sup>5</sup> The basic oppositions (+/- progressive: *rah/∅*, +/- accomplished: *∅/-t-*) only are represented below:<sup>6</sup> although present and past nicely parallel in the unaccomplished, as well as past and present in both accomplished and unaccomplished (last two lines), there is an asymmetry: whereas the simple form for the accomplished (- *t*) patterns with the two complex forms, structuring the whole of indicative forms, the simple form for the unaccomplished (+ *t*) does not pattern with the two complex forms and stands for a distinct mood. In these oppositions, the first is

<sup>4</sup> I am following Bybee (1994) in distinguishing unmarked from zero mark. Unmarked forms may have no overt mark and cover a wide (unspecified or with low specification) meaning, but the lack of overt marking may also refer to a specific meaning, therefore acquiring the status of zero.

<sup>5</sup> Tense can be defined as “the chronological situation of an event in relation with the speech act by which the speaker refers to that event”, or time of utterance T0, pertaining then to the succession of events (anteriority, simultaneity or posteriority). Aspect on the contrary pertains to the way of representation of the process as a predicate (Cohen 1989: 11, 42). It maps the three basic notions of state, process and event into three types of topological intervals which can be represented with open or closed boundaries (Desclès 1980, 1992).

<sup>6</sup> The +/- accomplished is found in the other moods too.

expected (marked progressive) and parallels English translations, but the second does not (marked unaccomplished).

A word on terminology: perfective is the most frequent label used to design the simple form (“I went”, *calâ* in Hindi) representing past events. It is named aorist in Nepali, simple past in French, preterit in English, and has received various names in the Indo-Aryan traditions, including indefinite perfect.<sup>7</sup> Given the very specific meaning of “perfective” in all the languages which oppose perfective to imperfective like Russian,<sup>8</sup> I will avoid the term and use the term preterit (referring to anterior events), leaving aside for the purpose of this paper the well-known non anterior meanings of the form (Montaut 2004, 2006). Since perfect is used by many as referring to present perfect (“I have gone”, *cala hûn*) I will use perfect to refer to the whole system derived from *calâ*, present perfect, preterit and pluperfect, rather than accomplished, which has no currency in IA linguistics.

History only can make this paradigm understandable. The major event in verbal morphology was the drastic impoverishment in MIA of the rich ancient paradigm: whereas OIA had some forty synthetic forms for tense-aspect, mood, voice, MIA maintained very few finite forms, and in some regions only the present in the indicative (imperative was maintained everywhere. Some dialects and languages also maintained the old synthetic sigmatic future in *-Sya* (> *s* > *h*). All of them used the past participle to represent past events. Out of this extremely reduced paradigm of synthetic forms, a number of compound forms with auxiliaries developed, leading to the rich present analytical paradigm of HU: Nespital (1980) for instance registers 39 tense grams and Dymshits (1985), who, unlike Nespital, does not consider the vector verbs as aspect markers, registers about 20.

## 1.2. The non-past (non- perfect) system

If we start from the standard situation in MIA (deliberately simplified in order to account for Hindi/Urdu), we could expect that the Sanskrit indicative present in *-ati* remains a present throughout the period up to now. The form has indeed survived but is no longer an indicative present:

*calati* (go-PRS.3M.SG) > *calai* > *calai* > *cale*  
*calanti* (go-PRS.3M.PL) > *calaiN* > *caleN*<sup>9</sup>

for the base *cal-* “go/walk” is now interpreted as a subjunctive (with optative meaning in independent clauses and various meanings including non specific and virtual in dependant clauses)..

The reason why the old present did not retain its meaning in modern HU is that, among other factors, the synthetic future was ultimately not retained, but the old present form had still a present meaning up to 19<sup>th</sup> century. Simply, the synthetic form had a wider meaning, covering the all non-past area (future, eventual, present, both actual and habitual), since no other form was available. This wide meaning can be designed as an open meaning (Garcia & Putte 1989, Bybee 1994), embracing several restricted meanings later to be distinguished:

(1)a. *ve kheleN*                      they play  
       3M.PL play-3M.PL

<sup>7</sup> Kellogg (1875: 234), who opposes this simple form to the present perfect (with “be” auxiliary in the present) and past perfect (with “be” auxiliary in the past).

<sup>8</sup> A distinction which Indo-Aryan largely displays by means of vector auxiliaries, semi-lexicalized items similar to the semi-lexicalized opposition between perfective and imperfective in Slavic languages (Nespital 1997).

<sup>9</sup> The second person, originally ending in *-asi*, also evolved into a final *-e* (*-asi* > *-ai* > *-e*), like the third person. The first one *-âmi*, has a more complicated story. Analogy reshaped the plural modern forms where original endings disappeared except 3PL *anti* > *aiN* > *eN*. Gloss is according to the Leipzig glossing rules, with the addition of CP: conjunct participle, OVA: obligative verbal adjective, POT: potential, OBLIG: obligation, H: honorific.

is still described as a subjunctive sometimes used as a general present in Kellogg (1875) and is still found in the literature of the time with a present meaning, although rarely in the texts written by the language teachers of the Fort William College during the first decade of the 19<sup>th</sup> century (1800-1810), who were supposed to set the modern grammatical standards. It is still used today with this meaning in proverbs, expressions well-known for retaining archaic forms (*jaisâ kare/karai vaisâ bhare/bharai* “you (will) reap what you sow”, *koî kare/karai, koî bhare/bharai* “someone does and another one benefits”).<sup>10</sup> Along with this open meaning of the old synthetic form, the first periphrastic form in *-tâ hai* (lit. “is ... -ing”) was, still in Kellogg’s times, used as a form restricted to present, that is, not future and not subjunctive. In the 19<sup>th</sup> century the modern contrast between habitual/generic and progressive was still not well established, since the first form is glossed by both present meanings in Kellogg whereas the second longer form in *rah hai* (lit. is stayed) is glossed by a more expressive periphrastic turn (“be engaged in”):

- (1)b. *ve khelte haiN* they play/ they are playing  
 3PL play-*ing* be-3M.PL  
 (1)c. *ve khel rahe haiN* they are engaged in playing  
 3MPL play stay-PP be-3M.PL

This means that the “is ...-ing” form, today a “general present tense” (*sâmânya vârtamân kâl*) had still in the middle of the 19<sup>th</sup> century its expected progressive meaning, along with the general/habitual meaning. Texts from the Fort William College illustrate this situation, where the *rah* form is only in the process of being grammaticized as a progressive, still retaining a stronger emphatic and literal meaning (“engaged”), still used as a stylistic optional or disambiguizing device.<sup>11</sup> When the *rah* form lost its literal meaning and came to be required for the expression of an actual specific process, then no longer perceived as an expressive device, the other form restricted its meaning to the expression of habits and genericity, losing its open meaning. Such a process of restricting the open meaning of an old simple (unmarked) form because a new marked form became obligatory for the expression of the other (restricted) meaning has been well documented: the English simple present for instance was according to Garcia & Putte (1989) originally an open present (such as the French unmarked present still is) with both meanings, and the marked periphrasis gradually emerged as an expressive optional device used for stylistic emphasis or to prevent ambiguities. One can regard this process as a conventionalization of the inference which, in conformity with conversational rules, constrains the listener, in the absence of the periphrasis, to rule out the marked meaning (Carey 1994). When it generalized, the unmarked form retained only part of its earlier meanings and the marked one lost its expressive strength and got grammaticized. The unmarked form can be said to have grammaticized a zero mark for the new meaning ruling out progressive.

In HU the simple form indeed underwent such a process (open non-past > non past restricted to the potential: non-future, non-present), but the newly grammaticized “is -ing”, originally a progressive present, in its turn underwent the same process (open present > non

<sup>10</sup> With future meaning too: *jaise kâlî kâmrî caRhai na dujo rang*, black will take no other hue

<sup>11</sup> Lalluji (*Premasâgar*, 4<sup>th</sup> chapter) for instance uses in the same context a *-tâ hai* (a) form and a *rahâ hai* (b) form for describing an obviously actual and not habitual process, with ostensive indications, when Krishna suggests the cowherd to visit the nearby Brahmins from Mathura presently celebrating a sacrifice right now (the smoke is visible)

a *dekho jo dhuân dikhât detâ hai tahâN mathuriye kans ke Dar se yagya karte haiN*  
 look where smoke is visible, Brahmins from Mathura are celebrating a sacrifice for fear of Kansa  
 b *vahâN gae jahâN mathur baiThe yagya kar rahe the*  
 we went where the Brahmins from Mathura were celebrating a sacrifice

The present expression for Kellogg’s translation of (1c) would be something like : *ve khelne meN lage haiN* (they play-INF in stuck are).



progressive). If the marked form in “is –ing” (*-tâ hai*) has already become an open present in the 19<sup>th</sup> century, it is because it was probably created for contrasting the actual process with the then open present expressed throughout ancient Hindi by the *-tâ* form.<sup>12</sup> This nominal form originates from the Sanskrit present active participle in *-anta* (> *ant* > *at*), later on suffixed with gender-number endings, and has been used as a predicate expressing general present from Chand Bardai’s *Prithvirâj Rasau*, 12-13<sup>th</sup> century, in Old Rajasthani (2a) and Old Marathi to Kabir, in the 13-14<sup>th</sup> century, and to Tulsidas’s *Ramayan*, 16<sup>th</sup> century, in Old Awadhi (2b):

(2)a. *kârtik karat pahukar sanân*  
 kartik do-*at* Pahukar bath  
 he takes his ritual bath in Pahukar (Beames: 130)

(2)b. *sab sant sukhi vicarant mahî*  
 all saint happy walk-*ant* earth-LOC  
 all the saints walked happily on the earth

(2)c. *puruS kahte*  
 man say-*t*-M.PL men say

The subsequent disappearance of the *-tâ* form from the domain of present left room for the *-tâ hai* form to occupy the entire space of present. Why did this participial form not retain its present meaning in the modern standard language,<sup>13</sup> why did it instead specialize in the expression of counterfactual? Bloch (1906) hypothesis that the predicative use of the nominal sentence dominated only in the accomplished (past) system, because of the resilience in the non-past domain of the old synthetic present, which indeed seems to have at least partly preserved its general present meaning since we still find it centuries later as in (1a).

To sum up, the non-past system between Old Indo-Aryan (OIA) and new Indo-Aryan (NIA) illustrates a cyclic process of widening>narrowing>widening in the meaning of certain forms. The Middle Indo-Aryan (MIA) opening of the meaning of the old Sanskrit present, due to the tumbling down of the whole finite paradigm, shows that a form tends to occupy the whole notional domain in the absence of other competing forms. The further gradual restriction of its meaning between MIA and modern NIA (non-past > future/optative > optative) was due to the emergence of new forms, first optional and emphasizing a contextual or stylistic meaning, then obligatory.

In contemporary Hindi/Urdu, the proliferation of new auxiliaries for habitual (frequentative), durative and progressive (*Vâ kar-*, *Vtâ rah-*, *Vtâ jâ*, *Vtâ calâ jâ-*, etc.), still optional and commutable with adverbs, has not yet restricted the meaning of the older less complex forms (for that matter the *Vtâ hai* or *V rahâ hai* forms), which can then been considered as open: the new forms are not fully grammaticized, hence not in a real complementary distribution with the less marked forms.

Open meaning and unmarkedness are relative. For instance, in a given portion of a notional domain (of the semantic map) like present, the “general present” (*Vtâ hai*) is relatively unmarked compared to the progressive present (*V rahâ hai*). Unmarkedness, if associated with the defect meaning and core value of the notional domain (here, present), will tell us that habitual and generic is the basic meaning of present, not specific (actual,

<sup>12</sup> Old Hindi covers a wide number of regional dialects which are today distinct languages for some of them at least and for all of them with very distinct verbal paradigms. However, since no particular language can be identified as the direct exclusive ancestor of Standard Hindi or Kharî bolî, referring to this disparate or syncretic ancestry is a necessity if we want to go beyond the 18<sup>th</sup> century in the history of the language.

<sup>13</sup> As it did for instance in Garhwali still today, with personal endings suffixed:

<i>mi</i>	<i>baccon thainki</i>	<i>paRhâNo</i>	<i>ku</i>	<i>kâm</i>	<i>kardûN</i>
1SG	children DAT/ACC	teach-INF	GEN	work	do-PTCP.1SG

I do the job of teaching children

In Sindhi the *-ta/to* form is used as a future (Beames 1871: 126, Trumpp 1872).

progressive). This is confirmed by many other languages. But it would be at least awkward to conclude that counterfactual is the basic meaning and core value in the wider domain of non past because its form is unmarked (*Vtâ*) compared with the general present (*Vtâ hai*). (Un)markedness is also the product of history and can enlighten the linguistic mapping of cognitive realities only to a certain point.

## 2. The “past” system: the nominal sentence as an expression for perfect or accomplished

### 2.1. The problem

As opposed to the present system, in a similarly impoverished verbal paradigm, the past (accomplished) system was quite early dominated by the passive past participle in *-ita* (> *iya* > *ya* > *a*). Originally used for transitive processes, the participle expressed the result of the event, somewhat in the same way as we today can say “understood” for “I have understood”. In classical Sanskrit already, the canonical expression of ‘X had done /did Y’ is ‘by-X Y done’, with the agent in the instrumental case (or genitive for pronouns) and the predicative participle agreeing in gender and number with the patient:

- (3) *mayâ /mana tat kRtam*  
 I-instr / I-GEN this-NOM.N.SG done-NOM.N.SG  
 I did/have done that

As is well known, this is the pattern inherited by the present HU ergative structure (4a) in the perfect as opposed to the nominative structure in the present or future:

- (4)a. *laRke ne /maiNne kitâb paRhî*  
 boy-OBL ERG /1.SG-ERG book-F.SG read-F.SG  
 the boy / I read the book
- (4)b. *laRkâ kitâb paRh rahâ hai / maiN kitâbeN paRhtâ hûN*  
 boy-M.SG book-F.SG read stayed-M.SG is 1SG book-F.PL reading-M.SG be-1SG  
 the boy is reading a book I read books

Given the fact that Sanskrit gave birth to all modern Indo-Aryan languages, we may wonder why only some (roughly speaking Western) of the Indo-Aryan languages developed the aspectually split ergative structure. Bengali for instance is a consistently nominative language, with nominative subjects and verb agreeing in person with the subject at all tense-aspects (5):

- (5)a. *âmi boi.Ta por.l.âm* b. *tui boi.Ta por.l.is*  
 1SG book-DEF read-PST-1SG 2SG book-DEF read-PST-2SG  
 I read the book you read the book

The question is all the more puzzling since a similar pre-ergative structure prevailed in all the Asoka Prakrits, in the East as well as in the West: (6a) is from Girnar in the North-Western region, whereas (6b), with the same structure as (3), is from Jaugada in the Magadhean region, presently Bengal-Orissa-Assam-Bihar. Since (a) and (b) have the same meaning and gloss, except for the verb base, causative in (a) and simple transitive in (b), I give them only once:

- (6)a. *iyam dhammalipi devânâmpriyena priyadassina ranna lekhapita*  
 this law-scripture of-gods-friend friendly-looking king inscribed  
 NOM-F.SG NOM-F.SG INSTR-M.SG INSTR-M.SG INSTR-M.SG NOM-F.SG
- (6)b. *iyam dhammalipi devanampiyena piyadassina [Iajina] lekhita*  
 the friendly looking king beloved of gods has (made) engraved this law-edict

Present predicates contrast with this structure in the same way as (4a) with (4b), as shown in (7), from Kâlidâsa’s *Vikramorvasiya*, where the pronominal subject is in the nominative (*hau <aham*) whereas in the past it is in the oblique (*pai < ?? âtman??*) already used as a syncretic marker for several oblique cases):<sup>14</sup>

<sup>14</sup> Quoted by Bubenik & Paranjape (1996: 112). Cf. *tai rasau hinduân* [you-OBL protected-M.PL Hindus-M.PL], “you protected Hindus”, vs *hau acchari nâhi* [I-NOM apsara NEG] “I am not a celestial woman”.

- (7) *hau pai pucchimi ... diTThî pia pai sâmuha jantî*  
 I-NOM you-OBL ask-PRS-1SG seen-F.SG loved-F.SG you-OBL in-front passing-NOM-F.SG  
 I ask you... Did you see (my) beloved passing in front (of you)?

This opposition between past and present systems started prevailing as soon as classical Sanskrit, and Bloch noticed the wide generalization of the nominal statements for expressing past: in *Vetâla* (10<sup>th</sup> century) 1115 expressions of past are of that type against 38 for finite verb forms (1906: 60). Predicative passive past participles were then used to express “various nuances of past tense and modality”, but this dominance does not mean that no other form existed: various finite forms were still in use, but none prevailed on others, and they became less and less frequent in texts, almost disappearing in MIA (Bloch 1906: 47-48).

What we still find in ancient NIA (the earliest phase of modern Indo-Aryan from 12<sup>th</sup> to 16<sup>th</sup> century) is the same nominal structure for past / accomplished statements, that is to say a pre-ergative structure. The only difference with Asoka’s statements in (6) is that the instrumental (or genitive) is no longer a distinct case since it got fused with other oblique cases, except with the locative which remained distinct in many languages. Old Bengali (8a-b), Old Awadhi (8c), which are Eastern dialects considered to derive from Magadhean Prakrit, present the same structure as Old Braj (9a), Old Panjabi (9b) and Old Marathi (9c) which are Western dialects considered to derive from Saurasenian or Marashtri Prakrits:

- (8)a. *kona purane, Kanhâ, hena sunili kâhini*  
 which purana-LOC Krishna, so heard-PST-F.SG story-F.SG  
 in which Purana, Krishna, did (you/one) hear this story? /was the story told?
- (8)b. *ebeN mâi bujhila*  
 now 1SG-OBL understood-Ø now I have understood
- (8)c. *mâi pâi vs. hau manuSa*  
 1SG-OBL obtained 1SG-NOM man (Jayasi)  
 I obtained (it) vs. I am a man
- (9)a. *susai [bat] kahî*  
 hare-OBL (speech-F.SG) said-fs the hare said
- (9)b. *guri dânu ditâ*  
 guru-LOC gift-M.SG given-M.SG the guru gave the gift (Guru Granth Sahib)
- (9)c. *aiseN myâ pahileN*  
 this-N.SG I-INSTR seen-N-SG I have seen this (Jnanesvari)

In (8) as well as in (9), the predicate is a nominal form agreeing in gender and number with the patient, whereas the agent, if expressed, is in the oblique form and does not control verb agreement. This series shows that up to a certain point the expression of past was general, and bifurcated later, between 14<sup>th</sup> and 16<sup>th</sup> c., since the first Eastern statements (from Chatterji 1926) are from 14<sup>th</sup> century caryâs.

## 2.2. The nature of the divergence : semantics and syntax of aspect

### 2.2.1. Evolution of aspectual semantics

As the structure in (6) got generalized, it started to lose its expressive meaning, originally emphasizing the result and not the process, so that it soon acquired an open meaning, encompassing process and result (cf. supra, Bloch’s quote). The original restricted meaning of the passive past participle, a state, can be represented as an open space, not taking into account any boundary, as opposed to the anterior which only takes into account the bound interval (event) in disjunction from the utterance time, and in contrast to the perfect, which represents the adjacency of the resulting state with the event which produced it, allowing for the topological representation below (from Desclès 1992):

state	---[////]T <sub>1</sub> -----T <sub>0</sub>
anterior	---[////]T <sub>1</sub> -----T <sub>0</sub>
perfect	----[---]////[T <sub>1</sub> -----] T <sub>0</sub>



When the participles generalized with open meaning (anterior event / preterit, resulting state / perfect), they got more and more perceived as an active predication since there was no other option, and lost the passive meaning of the patient orientation. As the need was felt in certain statements to avoid ambiguity or to emphasize the resulting state, a new form was created by the adjunction of a copula, originally expressive then grammaticizing in the meaning of resulting state. Initially the copula occurred in the first and second person to prevent agent ambiguity (Bloch):

- 10a *kenâsy*                      *abhihatah*  
 who-INSTR-be-2SG    beaten-NOM-M.SG  
 by whom have you (not he, not we, not she etc.) been beaten
- 10b *tenâsmi*                      *sopacaram uktah*  
 3SG-INSTR-be-1SG    respectfully said-NOM-M.SG  
 I (not you, not they) have been told this by him = he told me

The copula later helped emphasizing stativity (to prevent another kind of ambiguity, event or state) or simply introducing stylistic variation according to Breunis and Bloch, and from the moment this originally stylistic variant became more expressive of state or “condition” it was no longer a stylistic variation but a grammaticized expression of perfect or resulting state of an event Breunis (1990: 141). At the same time, the simple form restricted its previously “open” meaning to the expression of anteriority (event: preterit). This echoes the story of the renewal of the present (first competing with a new progressive marker in the specific meaning then retaining only the other meaning). The situation found in early NIA similarly shows an open meaning, which was probably in the process of getting restricted in front of the competing copula form, whereas the contemporary situation clearly shows a strictly complementary distribution of both forms. If we agree with Bybee (1994) we may analyse this as an emergence of a zero mark with the meaning of anterior, whereas previously the unmarked form had unspecified meaning in the whole perfect system.

Obviously when the former participle is used as a predicate for representing events, even if the agent remains in an oblique case as in passive sentences, the emphasis is more on the process (source oriented) than on its result and the whole statement gets more and more perceived as active and no longer passive. Besides, it was the only expression for past processes. This is expressed by Nespital (1986: 145) as the emergence of a “Neuer Proto-aktiv Satz”, which he observes since the pali stage in *Milindapanha*.

### 2.2.2. Changing morpho-syntactic patterns

This active transformation was implemented differently in the East and in the West, and here lies the today opposition in the syntactic alignments. In the East, the active renewal was radical, and the pre-ergative structure was de-ergativated so to speak, between the 14<sup>th</sup> and 16<sup>th</sup> century. Chatterji (1926) calls the process an active conversion, comparing the form, not the meaning, with the medieval structures (8). The agent, in conformity with the linguistic perception (active process) became expressed in the nominative or unmarked case, whereas new personal endings were affixed to the verbal form. What is interesting is that these affixes are still now clearly distinct from the older endings of the present.

- (11) *âmi boi.Ta*                      *por.l.âm*  
 1SG book-DEF read-PST-1SG      I read the book (present *âmi por-i*)  
*tui por.l.i:* 2-nonH read-2nonH, “you read” (present *tui por-is*)  
*tumi por.l.e 2* read-2 “you read” (present *tumi por-o*)

The transformation then ends up providing a nominative alignment with standard personal predicates with a standard past marker *-l-*, as rightly today analysed. But its origin denotes no trace of anteriority marking, since this suffix is widely found throughout the nominal class, mostly with the meaning of a “diminutive” affix (*rangilâ* “coloured” from *rang*

“colour”, *kanTilâ* “thorny”, from *kânT* “thorn”). It also behaved more or less like the so-called “enlargement” suffix *-k-* extensively added to nominal bases in late OIA.<sup>15</sup>

The same transformation happened in Bhojpuri and to a lesser degree in Awadhi: “when the original passive construction was lost in Bhojpuri as in other Magadhean dialects, the Prakritic constructions with the passive participle became a regular verb in Bhojpuri, and it began to be conjugated by adding personal terminations which came from the radical tense as well as from the *s/h* future” (Tiwari 1966: 171).

Western languages on the contrary, instead of re-aligning the morpho-syntactic pattern on the nominative model fit for action processes, reinforced the oblique marking of the agent by using a postposition, either specific (HU) or not (Marathi), and so developed the full fledged ergative structure for the perfect system (anterior, present perfect, pluperfect).<sup>16</sup> Only some modern IA languages retain the old oblique agent (Jaisalmeri, Western Rajasthani dialects). But this recent re-characterization of the old instrumental does not make the structure more passive and its “perception” as an active structure shows in the various subject properties attached to the marked agent, who has now most of the control properties (reflexivation, conjunctive participle), but still never controls agreement, even with a marked patient.<sup>17</sup> Bubenik & Paranjape (116-7) suggests that the placing of the agent in the first position in late MIA correlates with the linguistic perception of the oblique noun as a semantic subject. Breunis (1990) in his chapter on word order (chapter 6) suggests that the fronting of the agent is earlier, which is confirmed by many of the examples from Bloch (1906). The fronting of the marked agent amounts to treat it as a topic, which is a first step on the way to shifting it to the subject status.

We can then summarize this general evolution by saying that Eastern languages have simply gone one step further than Western ones in the same logic, they have fully endowed the agent with subject properties, whereas the Western languages have gone a step further in the ergative pattern but still have endowed the agent only with the semantic, syntactic and to a certain extent pragmatic properties.

Bengali is a good example of the full cycle from a nominative language (Sanskrit) to a pre-ergative one (Old Bengali) and back to a nominative one, and Hindi/Urdu of the first part of the cycle (from a nominative to an ergative one. This cyclic evolution has of course been gradual and is still in process, and the occurrence of personal endings in Marathi at the second person, as well as the use of nominative agents for first and second person in Marathi and Panjabi,<sup>18</sup> may be interpreted as a sign of a transitional stage towards a nominative patterning. For instance, (12a) in Marathi and (12b) in Panjabi exactly structured as (4a) in Hindi/Urdu, show a marked agent, only gender-number agreement with the patient on the participle-like predicate, but (13a) in the second person shows, after the gender-number agreement with the patient, a *-s* which is a personal ending referring to the agent and (13b) in Panjabi shows unmarked agent at the first and second person:

(12)a. *tyâni pothiâ lihiliâ*  
 3M.SG book-F.PL read-PST-F.PL  
 he read the book

<sup>15</sup> That is why *-l-* is observable in other tenses in Bhojpuri (present, past) and Pahari (future, past). Although Tiwari traces the origin of the future/present *-l-* in *lag* “touch”, it is generally considered as a diminutive (*laghutâvacak*: Chatak), cf. Tessitori (*l < ll < ill*). Tiwari relates the past *-l-* to the one in *tonaila* (< *tunda + illa*) “pot bellied man”.

<sup>16</sup> In the various moods too.

<sup>17</sup> In which case a default agreement occurs (M.SG in Hindi/Urdu and Panjabi, N.SG in Marathi).

<sup>18</sup> The Marathi past ending always differs from the present one (*-s* also) since in the present, *-s* follows a vowel which varies according to the subject gender (*tu topi kâDh-t-os* : « you-M.SG take off the hat », *tu topi kâDh-t-es* : « you-F.SG take off the hat »), whereas in the anterior it follows a vowel referring to the patient (*tu topi kaDh-l-i-s* « you-M.SG took off the hat »). In the first person, Marathi like Panjabi in both first and second person, has unmarked agent and agreement with the unmarked patient.

- (12)b. *one sanun tîn botlâ dîttyâ*  
 3SG-ERG 1PL-DAT three bottle-F.PL give-F.PL  
 he gave us three bottles
- (13)a. *tu kâm keleNs*  
 2SG work-N.SG do-PST-S.SG-2SG you worked/did the work  
*tu pothî lihi.l.î.s* *tu pothiâ lihi.l.iâ.s*  
 2SG book-F.SG read-PST-F.SG-2SG 2SG book-F.PL read-PST-F.PL-2SG  
 you read the book you read the books
- (13)b. *main (tû, tustî) ih kamîzân kharîdiân*  
 I (you) this shirt-F.PL buy-F.PL  
 I (you) bought these shirts

### 2.3. A similar shift in other Indo-European languages: from passive to active?

A very similar evolution has been studied by Kurylowicz for Persian (1953) and French (1931, 1965), and by Benveniste (1952, 1960, 1965), also for Persian and French. Like late Sanskrit, late Latin substituted to the old synthetic perfect a new periphrastic expression with the agent in the dative case (*dativus auctoris*), the patient unmarked and a passive past participle as a predicate (often followed by the copula).<sup>19</sup> The forms in Persian (14) are exactly similar to (3) in Sanskrit, including the lexical bases, except that the instrumental is not an option for the agent, always in the genitive case, and the Latin (15) is similar morpho-syntactically:

- (14)a. *mana kardam*  
 I-GEN done-N.SG I have done [that]
- (15)a. *mihi id factum*  
 I-DAT this-NOM-N.SG done-N.SG I have done that

Table 2 summarizes the analogies of the periphrastic perfects (I did / have done this) in the three ancient languages, which still accounts for the present state of HU:

	marked agent	unmarked patient	Verb- <sup>Patient</sup> verbal adjectif <sup>N2</sup>
OIA	<i>mayâ</i>	<i>tat</i>	<i>kRtam</i>
OPer	<i>manâ</i>	<i>tya</i>	<i>krtam</i>
Latin	<i>mihi</i>	<i>id</i>	<i>factum</i>
NIA (W)	S-ergative <i>maiNne</i>	O-absolutive <i>yah</i>	Verb- <sup>OD</sup> <i>kiyâ</i>

Whereas Persian later undergone the same evolution as Bengali, shifting the agent to the nominative case while adding new personal endings to the old participle (14b), Latin realised the same syntactic and semantic shift by using the “have” auxiliary, lacking in IA (15b):

- (14)b. *man kardam* [I-NOM did-1SG], *to kardi* [2SG-NOM did-2SG], etc.  
 (15)b. *ego id habeo factum*  
 I-NOM this-N.SG have-1SG done-N.SG I have done this

(15b) is the structure now inherited by the modern Romance languages, such as French, with “have” verb conjugated in the present as an auxiliary for the present perfect and agreeing with the subject, before the participle, the latter still agreeing with the object in some cases:

<sup>19</sup> What is generally meant by perfect in the traditional grammar of Latin is the-(v)i form, usually translated by either as an anterior (*amavi* “I loved”) or a present perfect (“I have loved”). The difference in both IA and Romance languages is that the old synthetic form was maintained and is still living as the simple past or aorist or definite past (various terminologies according to languages and centuries), only written in contemporary French but very common in spoken Spanish and Italian.

(15)c. *j'ai fait (cela), tu as fait (cela), nous avons fait*  
 I have-1SG (this) 2SG have-2SG done (this), 1PL have-1PL done<sup>20</sup>

Kurylowicz as most of the then scholars admitted the “passive” origin of the modern perfects derived from the passive past participle: “In the evolution that we consider, the decisive step is in the replacement of the dative + *esse* [be] + nominative by nominative + *habere* [have] + accusative. The passive construction has been transformed into an active one” (1931: 107). This is also the implicit assumption of Chatterji and Tiwari when they interpret the periphrastic renewal (nominative pattern) as an active conversion. Benveniste on the contrary argued for a “possessive” meaning of the perfect, aiming at both the ancient periphrastic expression and the present meaning (“le sens possessif du parfait”). One of his argument is casual: the genitive case used to represent the agent of the Latin or Persian perfect is also the possessive marker in both languages, distinct from the case used in Old Persian for the agent of passive verbs (*hacâma* in Old Persian, *a me* in Latin).<sup>21</sup> For instance *mihi filius est* (I-dat son-nom-ms is) “I have a son” or *mihi pecunia est* (I-dat money-nom-fs is) “I have money” is structured in the same way as “I did this” in (15a) and has been renewed in the same way as (15b) by the use of “have” verb, nominative subject and accusative object: *ego pecuniam habeo* (I-nom money-acc-fs have-1s). His other argument for the possessive reading is that the auxiliary “have” is also the stative verb which forms possessive statements: the older dative “possessor” has simply been transformed into a nominative possessor. That obviously the casual argument does not really hold for Sanskrit and Prakrits (instrumental is the agent in passive statements, and never expresses a possessor), does not entail that the general hypothesis is wrong. We come back to these problems and to the notions of possession and stativity later (section 4).

### 3. The modal future: a similar development

#### 3.1. Parallel historical facts

But Kurylowicz’s theory of the passive meaning of the old periphrastic passive allows him to grasp a very interesting analogy between perfect and future in the Romance languages. The development of the modern future in Romance languages also stems from a periphrastic renewal of the older synthetic Latine future (*amabo* “I will love”). This renewal occurred in Late Latin at the same time as the periphrastic perfect and on the same pattern: *mihi cantandum est* (Kurylowicz 1965) parallels *mihi factum est*, with a dative “subject”, a passive verbal adjective or gerund, originally meaning obligation in *-nd-* (glossed OVA for obligative verbal adjective), agreeing with the patient if any (16a) or else in the neuter *-um* (16b).

- |        |  |   |
|--------|--|---|
| (16)a. | <i>mihi virtus colenda est</i><br>I-DAT virtue-F.SG cultivate-OVA-F.SG be-3SG<br>I shall/have to cultivate virtue  | <i>mihi id faciendum est</i><br>I-DAT this-N.SG do-OVA-N.SG be-3SG<br>I shall/have to do this |
| (16)b. | <i>Carthago delenda est</i><br>Carthago-F.SG delete-OVA-F.SG be-3SG<br>Carthago is to be destroyed<br>Carthago should/will be destroyed, (we) shall destroy Carthago |   |

<sup>20</sup> With a preposed object: *les choses que j'ai faites, je les ai faites* (the things-F.PL which I have done-F.PL, them I have done-F.PL).

<sup>21</sup> “This difference in the casual form shows of the pronoun *manâ* on one hand, *hacâma* on the other hand, shows that the perfect must be interpreted as a category in its own right, altogether distinct from passive, it is an active perfect with possessive expression”. (PLG1 179-80).

The Indo-Aryan data developed a strikingly similar structure, since in Asoka's times the obligative future (then the future) is expressed by an obligative passive participle in *-tavya* agreeing with the patient. (17) is the second part of example (6), again with a Western expression in Girnar (17a) and an Eastern expression in Jaugada (17b), identically patterned:

- (17)a. *idha na kimci jîvam arâbhitpâ prajuhitavyam na ca samâjo kattavyo*  
 here no some living kill sacrifice. no and assembly do  
 NOM-N.SG CP OVA-NOM-N.SG NOM-M.SG OVA-NOM-M.SG
- (17)b. *hida no kimci jive alabhitu pajohitavye no pi ca samâje kattavye*  
 one should not sacrifice by killing a living creature nor hold a meeting  
 (it should not be sacrificed by killing a living being nor a meeting should be held)

Table 3 summarizes these analogies in IE periphrastic forms for future and perfect:

	Marked Agent	Unmarked Patient	Verbe- <sup>Patient</sup>
	N1-instr/gen/dat	N2-nom	verbal adjective
OIA perfect	<i>mayâ</i>	<i>tat</i>	<i>kRtam</i>
P	<i>manâ</i>	<i>tya</i>	<i>krtam</i>
LATIN perfect	<i>mihi</i>	<i>id</i>	<i>factum</i>
	<i>mihi</i>	<i>filius (liber)</i>	<i>est</i>
future	<i>mihi</i>	<i>id</i>	<i>faciendum</i>
OIA	<i>mayâ</i>	<i>tat</i>	<i>kartavyam</i>

The last part of the story is exactly similar to what happened with the perfect: this passive (according to Kurylowicz) structure got transformed into an active one by shifting the dative/instrumental agent to the nominative, the patient to the accusative and using the auxiliary “have” (*habere*) after the infinitive:

- (18)a. *ego cantare habeo*  
 I-NOM sing-INF have-1SG I shall sing  
 I have to do that/I will do that
- (18)b. *ego id facere habeo*  
 I-NOM this-ACC-N.SG do-INF have-1SG I shall do it

And the modern future, although written today in one word, is clearly derived from the have construction since the personal endings paradigm of future in French for instance is the present of “have” verb:

- (18)c. *je chanter-ai, tu chanter-as, nous ferons*  
 I sing-have-1SG, you sing-have-2SG, we sing-have-1PL  
 I will sing, you will sing, we will sing

The old system of (17) prevailed in the Magadhean languages up to around the 16<sup>th</sup> century. Transitive as well as intransitive have for their future, the old verbal adjective of obligation (OVA) in *-tavya > -abba > ab > b*) with an instrumental agent.<sup>22</sup> But the old modal meaning, quite perceptible in Late Sanskrit (19) is gradually lost in NIA and replaced by a temporal meaning of future as shown in Old Bengali (20a-b) or Old Awadhi (20b-c):

- (19)a. *tribhir yâtavyam*  
 three-INSTR go-OVA-NOM-N.SG the three have to go
- (19)b. *na kSeptavyâ brahma-vâdinâ na câvamânyâh*  
 neg neglect-OVA-NOM-M.PL Brahman-knower-M.PL neg contempt-OVA-NOM-M.PL  
 (you) should not neglect nor contempt those who know the Vedic word
- (20)a. *maï dibi piricha (SK mayâ dattavyâ pRcchâ)*  
 I-INSTR give-b-F.PL question-F.PL ‘I will ask questions’ (Chatterji)

<sup>22</sup> The *-tavya* form is still present in some Hindi *tatsam* words, with its modal meaning, usually as nouns (*kartavya* “what has to be done, duty”).



- (20)b. *Thakiba, khaĩba maĩ*  
 stay-*b*-Ø eat-*b*-Ø I-INSTR I will stay, eat
- (20)c. *ghar kaise paithaba maĩ*  
 house how enter-*b*-Ø I-INSTR how shall I enter?
- (20)d. *sukh lahab rām vaidehĩ*  
 bliss get-*b*-Ø Ram Vaidehi Ram and Sita will find happiness

The later evolution of these *-b-* futures has been similar to the evolution of perfects in the East: personal endings were added to the participle, similar to the perfect endings and distinct from the present ones in Bengali, in parallel with the shifting to a nominative structure:

- (21) *āmi boiTā porbām, tu porbi, tumi porbe, etc.*  
 1s book-DEF read-*b*-1SG, 2nonH read-*b*-2nonH, 2 read-*b*-2  
 I will read the book, you will read, etc.

In Bhojpuri too and Awadhi, Saxena (1937: 261) notes that the *-b-* future was generalized in ancient NIA in the region, before the re-introduction in Western Awadhi of the sigmatic forms for the 1<sup>st</sup> and 2<sup>nd</sup> persons.<sup>23</sup>

The Western dialects in contrast either maintained or re-acquired the sigmatic synthetic future or developed a periphrastic future with a “go” verb (*gachati*), added to the synthetic open form for non past, like Hindi/Urdu *calegā* “he will go”.

### 3.2. Modalities and the non-nominative pattern

This striking parallel in Bengali between past and future shows, as already argued by Kurylowicz, that perfect and future share a common evolution which suits a common meaning. Benveniste opposed this view and denied any relation at the semantic level between future and the obligative participle.<sup>24</sup> But many various languages show a possible grammaticization of an obligative form in the meaning of a future (Heine 1993), and the IA data is a particularly clear evidence of such a development. Kurylowicz (1965) maintained that both future and perfect evolved on similar lines from passive nominal structures (X been done, X to be done) to auxiliated active structures with “have” (have this done, have this to do) because they are both views over the process from the present utterance time: “future and past structures are originally forms of present, they are related to the time and situation of utterance. They do not express action, but the need or intention to act, and the present result of an action which has already been accomplished”.

The link between the old nominal obligative structure and perfect is confirmed by the Marathi data in a different way, since Marathi does not exhibit a future of the Bengali type. But it maintained the old obligative verbal adjective, in modal structures closer to the original than in the Magadhean modern languages : potential and obligation not only maintain the *-āv/av-* morphology inherited from the *-tavya* verbal adjective, they also maintain the old syntax with an instrumental subject (Joshi 1900: 468) and they also allow interesting case alternations. Bloch already noted that the “the use of these forms is similar to that of the form for past” (1935: 264), on the basis of the obligative statement borrowed from Joshi, where the “logical subject” *ahmĩ* is instrumental and *karāveN* agrees in the neuter-singular:

- (22) *ahmĩ kây karāveN*  
 I-INSTR what do-*āv*-N.SG what should I do?

The pair in (23), from Joshi (1900), with obligative meaning, shows the “active conversion” of this “passive” structure in a way very similar to what happened in Bengali. (23a) is a quasi

<sup>23</sup> The sigmatic Sanskrit future (*Sy.ati* > *-s-* > *-h*) was retained in some Western languages like Western Rajasthani, but also in Awadhi at certain persons.

<sup>24</sup> According to him, *habere* in Late Latin future was only used in the past, with passive infinitive, to express a predictive meaning, specially in the Christian predication; the meaning “have to” could in no way produce a future meaning and was never confused, and still today is never.

ergative alignment and *neN* marker although the verb is intransitive, agreeing in the neuter whereas (23b), still competing in the 19<sup>th</sup> century, shows a nominative alignment with a verb agreeing with its nominative subject:<sup>25</sup>

- (23)a. *tyâneN ghariN yâveN*  
 3M.SG-ERG home-LOC come-OBLIG-N.SG he should come home
- (23)b. *to ghariN yâva*  
 3M.SG-NOM home-LOC come-OBLIG-3M.SG  
 he should /may he come home

In contemporary Marathi, although according to Pandharipande, ergative (agent) case can also have the optative meaning (“he may go home” is the translation she gives for *tyâne ghari dzâwe*), according to other modern writers there is now a difference in meaning, the ergative pattern being obligative while the nominative one is “optative” (Wali 2004: 31), “may he come home”. The next series in (24) illustrates the potential modality, also derived from the obligative verbal adjective, also allowing casual alternation. The alternation here is between two oblique forms within the same syntactic pattern, the dative and the “instrumental”, according to Joshi and Pandharipande, who however glosses the same *ne* as agent in obligative statements (1997: 438, 434):

- (24)a. *majhyâneN /malâ câlavleN*  
 I-INSTR / I-INSTR go-POT-PST-N.SG I could/was able to go
- (24)b. *majhyâneN / malâ dhadâ sikhavlâ*  
 I-INSTR / I-DAT lesson-M.SG learn-POT-PST-M.SG  
 I was able to learn the lesson
- (24)c. *titSyâne / tilâ bharbhar tsâlvât nâhi*  
 3F.SG-ERG / 3F.SG fast walk-POT NEG  
 she cannot walk fast

It is however remarkable that *neN*, whether identically glossed or not, a single morphological unit with a single origin (see infra), alternates with both dative and nominative markers for the main participant. Examples (23) and (24) are a further argument to regard the modal system originated from the *-tavya* verbal adjective as a parallel structure to the perfect pre-ergative or ergative structures, a fact clearly captured by Bloch in the early 20<sup>th</sup> century (1920). At the same time, they are a further argument, too, to consider the ergative IA pattern as part of a larger way of mapping non action, instead of viewing it as an aspectual split.

#### 4. Place of these evolutions within the global economy of the NIA system

##### 4.1. Parallel patterns for what is aimed at, accomplished, experienced

Benveniste, who also claimed that future and past do not represent tense but “views on time from the present” (1965), is however only concerned with perfect since he does not recognize any deep or interesting analogy with the development of futures. But he clearly states that the “so-called” passive structure, in fact according to him a possessive structure with its *dativus auctoris*, is a stative one. Instead of viewing the “avoir/have” conversion as a converting device from passive to active (as did Kurylowicz), he regards it as a device for “inversion”. The idea stems from the possessive statement which in Latin patterns as the periphrastic future (table 3): “avoir is nothing else than a “be-to” inverted (*mihi est pecunia-money = habeo pecuniam*). The nominative is not an agent but the localizer of a state,<sup>26</sup> seemingly transitive but in reality intransitive and stative”. Similarly when used as auxiliaries as in the perfect “I have done” (Benveniste 1960: 197).

<sup>25</sup> Significantly, as in the past, the verb adds a –s personal ending for the second person.

<sup>26</sup> In French, “un siècle d’état”.

The above formulation makes the expression of perfect one among other stative predications of localization. Viewed under this light, the term of “possessive” applied to perfect is understandable, providing we do not over-semanticize it and read it as a label for “have” sentences in general, most of them are indeed stative and only some possessive. The ‘be’ to ‘have’ “inversion” which transforms a dative alignment into a nominative alignment retains the static feature and the semantic role of localizer of the first nominal (in the dative or nominative). Adapted to the ergative IA pattern which is the continuation of the ‘be’ structure, the periphrastic perfect commented by Benveniste as a stative, not passive structure, such an analysis suggests that the *ne* sentences too are localizing predications,<sup>27</sup> similar to (25a) for obligative predicates with verb “be”, perception or cognitive predicates (25b) and more generally experiential statements, transitive and intransitive (25c):

- (25)a. *mujhko jute kharîdne hoNge*  
 I-DAT shoe-M.PL buy-INF-M.PL be-FUT-M.PL  
 I will have to buy shoes
- (25)b. *mujhko choTe choTe ghar dîkh rahe the*  
 I-DAT small-M.PL small-M.PL house-M.PL appear PROG-M.PL be-PAST-M.PL  
 I saw (was discovering) houses
- (25)c. *mujhko Thand hai*  
 I-DAT cold-F.SG be-PRS-3.SG  
 I am cold (French “j’ai froid”)

The series (25) morpho-syntactically patterns exactly as (4a) and (6), even when the predicate is a single participant one since in HU such predicates usually consist in verbo-nominal expression (NV) and the verb agrees with N. Similarly, possessive statements (with locatives) present a stative verb, mostly “be”, which agrees with the object possessed, and the possessor, although the main participant in the first position, is marked (*ke pās* “near”, *meN* “in”) and does not control agreement. Significantly, the equivalent of type (25) statements in Romance languages involves the verb ‘have’ more often than in English and Benveniste includes these statements too in his analysis of the “possessive perfect”.

Table 4 summarizes the analogies between the various types of predications of localization:

OIA	agent-INSTR	patient-NOM	verbal.adjective <sup>patient</sup>
	<i>mayâ</i>	<i>tat</i>	<i>kRtam/ kartavyam</i>
Latin	<i>mihi</i>	<i>id</i>	<i>factum /faciendum</i>
NIA (W)	agent- <i>ne</i>	patient-NOM	Verb <sup>patient</sup>
	<i>maiNne</i>	<i>yah</i>	<i>kiyâ</i>
	experiencer- <i>ko</i>	theme-NOM	Verb <sup>theme</sup>
	<i>mujhe</i>	<i>yah</i>	<i>dîkhâ</i>

#### 4.2. The cognitive scenarios of non-transitive processes

This suggests more affinity with an intransitive model than with a transitive one. If we come back to the aspectual semantics of perfect (emphasis on result), it is a well-known fact since DeLancey (1981), who first associated both ergative and dative experiential statements, that aspectual semantics requires the viewpoint to be associated with the result (goal) and not with the source at the “natural” origin of the process, which is encountered secondarily (hence marked), upstream so to speak. In this logic, the source no longer retains the same relation with the process and its goal: in the standard transitive model, the source is the natural start-point of a process ending on the goal (endpoint), whereas in the ergative pattern the

<sup>27</sup> More details in Montaut 2004b.

source is outside the predication, which has the goal as its start point. This means that the ergative case is not a simple grammatical marker used to reverse the same trajectory, within the same cognitive scenario. The trajectory itself is a different cognitive scenario. As Langacker (1999: 35) puts it, ERG encodes an altogether different relation, involving a different perceptive strategy, thus being rather a semantically significant case and “only incidentally associated with grammatical relations” (cf. section 4.3). It only profiles the last part of the clause as “onstage” (the “trajector” and main figure being the patient), in an autonomous way (not dependant on the source), whereas a nominative transitive alignment profiles the full path (the “trajector” and main figure being the agent) and builds the relation as dependant on the source. The ergative pattern is then more like an intransitive structure, corresponding to what Langacker calls a thematic relation (‘the ice melted’, profiling only the end part of the action chain, whereas ‘Bob melted the ice’ profiles the whole chain). As a thematic relation, “it enjoys a certain autonomy vis-à-vis the agent and the flow of energy, even for inherently energetic processes”, and is thus an “absolute construal” (Langacker 1990 : 245-8). The starting point has conceptual autonomy from the source, a reason why “the path involved is more abstract and of lesser cognitive salience”. Both structures are thus shown to differ deeply, and not only at the morphological level.

The affinity with intransitive patterns is evidenced by Hindi/Urdu examples such as (26), where 26b) in the ergative may give particular emphasis to the resulting state (26c) by adding the past participle of “be” to the predicate (‘is having been done’), in a quasi equivalent meaning as the intransitive nominative pattern (26a):

- (26)a. *maiN unse mitratâ banâe hue hûN*  
I-NOM 3PL-with friendship-F.SG make-caus being be-1SG
- (26)b. *maiNne unse mitratâ banâi hai*  
I-ERG 3PL-with friendship-F.SG make-PRF-3F.SG  
I have made friendship with him
- (26)c. *sîtâ ne aTahârû pahne hue the / sârî pahnî huî thî*  
Sita ERG earring-M.PL wear-PP been be-M.PL / sari-F.SG wear-PP been be-F.SG  
Sita was wearing (had put on) earrings /a sari”<sup>28</sup>

Whereas table 4 showed tripartite models, things could then be reformulated in a binary model with the localizer outside the profiled relation, which itself is basically intransitive and mapped into an “absolute construal” (Langacker’s terms) into table 5:

[agent-ne]	<b>patient-nom</b>	<b>Verb<sup>patien</sup></b>	<b>t</b>
[experiencer-ko]	<b>theme-nom</b>	<b>Verb<sup>theme</sup></b>	

### 4.3. Case semantics

Now, if the forms inherited from the *-tavya* participle may encode this localizer in the dative as well as in the ergative (Marathi data), the alternation makes it dubious that ergative is basically a marker for voluntary controlled action. The volition-control feature is certainly

<sup>28</sup> We may say that “*huâ*” is not a specific marker for stativity since we also find it with unaccomplished participles, as in *vah gâtâ huâ â rahâ thâ* (3s singing *huâ* come PROG PST) “he was coming (while) singing” where it simply marks concomitance. But the relation between resultant state (perfect) and concomitance is well known (Cohen 1992), both marking the link of the process with the situation of reference (set by utterance), either through a relation of inherence (progressive: being in the process) or by a relation of adjacency (perfect: being with or after the process). (26c), like (26b) can be substituted by the intransitive :

*Sîtâ aTahârû pahnî huî (pahne hue) thî*  
Sita-fs earring-mp worn been-fs (worn been-adv) was Sita was wearing earrings

present in a massive majority of ergative statements, but it is probably linked with the semantic class of transitive predicates, rather than with the case marker,<sup>29</sup> since transitive basis in HU are generally + volitional or + consciousness/awareness. In contrast, the use of dative refers to lack of conscious awareness, as shown in (27): the ergative/nominative statement only involves conscious awareness rather than a deliberate choice, whereas the dative statement rules it out:

- (27)a. \**us din maiNne tumse irSyâ kî thî par iskâ bodh nahîn thâ*  
 that day I-ERG 2-with jealousy do PPRF but this-of awareness NEG was  
 (27)b. *us din mujhe tumse irSyâ huî thî par iskâ bodh nahîn thâ*  
 that day I-DAT 2-with jealousy be-PPRF but this-of awareness NEG was  
 that day I felt jealous from you but I was not conscious of it

When alternating with nominative case as in Marathi (23a), ergative (glossed either as such or as instrumental by linguists) is obligative, whereas nominative is optative or epistemic (Wali 31), which refers to a “demand” or “wish” from the speaker and not from the subject in the non-first person. Here ergative appears less “volitional” than nominative. In Delhi Hindi (DH), Hindi the use of the ergative marker has developed for obligative statements as (28), supposedly under the influence of Panjabi (*ne* ergative, *nuN* dative), competing with the standard Hindi construction in the dative (25a).

- (28) DH *maiNne jânâ hai*  
 I-ERG go-INF is I have to go  
 SH *mujhe jânâ hai*  
 I-DAT go-INF is

While it sometimes conveys a “conscious choice” (Butt 1994) as opposed to the standard dative construction, it has been proved (Bashir 1997) to also convey different meanings varying according to the person of the verb and to the context, including a “prospective, anticipated, injunctive” meaning, which is consistent with the modal nominal pattern of (x).

But the very fact that dative and ergative can alternate in patterns like (29) and that closely linked languages have either one or the other case for obligative statements suggests that there is a deep affinity between dative and ergative. For example, Pahari in both its regional variants Garhwali (29a) and Kumaoni (29b) use only the ergative marker in the “obligative future”, expressed by a bare infinitive, where standard Hindi/Urdu use the dative. Garhwali uses *na* or *la*, and Kumaoni uses *le*:<sup>30</sup>

- (29)a. *maiNna /maiNla âj barat rakhNa* I have to fast today  
 (29)b. *maiNle âj barat rakhNa*  
 I-ERG today fast keep-INF  
 (29)c. *mujhe âj vrat rakhnâ hai*  
 I-DAT today fast keep-INF is

All these facts of alternation suggest that there is no polar opposition between *ne/le* and *ko/la*, the markers for ergative/dative, although in many contexts they convey distinct and even opposed meanings. The instrumental use of *ne/ni* in Marathi (for inanimate cause and instruments), hence the gloss, as well as the interpretation of the ergative structure as passive, with instrumental agent, wrongly represent the case marker as a source, opposed to the dative (goal). But the historical evidence for the origin of both tales a different tale, more in conformity with Benveniste’s “possessive” reading and my own analysis as a localizer for stative predication.

<sup>29</sup> Ergative predicates like *maiNne dekhâ* “I saw” (aside with “I looked”), *maiNna pâyâ* “I found”, *maiNne mahasûs kiyâ* “I felt” make it clear that ergativity in Hindi is not always associated with volitionality and control.

<sup>30</sup> Both languages are classified as belonging to the Pahârî Madhy BhâSâ, Garhwali probably more influenced by Hindi since the traditional ergative marker *la/le* tends to commute with *na* in urban places. The obligative future (*bhaviSyat kâl*) is considered by Juyal (1976) as passive in meaning *karNîy arth*.



#### 4.4. Origin of the markers

First of all, it is obvious than the ergative *ne/ni* can in no way originate from the Sanskrit instrumental *-ena*, even reinforced: Hindi *main* may reasonably be assumed to derive from a reinforcing of the classical instrumental form *mayâ* via *\*mayena* (Chatterji: 744) and shows only a nasal ending vowel, as all forms derived from the Sanskrit *-ena*. It does not seem to have appeared before the end of 14<sup>th</sup> century (Namdev has *tâyaneN*) and was not generalized then. In the early century Konkan, the *n, na, nî* form means “to” and similarly *ne* in Bhili, *ne/nai* in Rajasthani has both meanings “by” and “to” (Grierson). Today *nûN* means “to” in Panjabi and *ne* is the agent marker. The etymology of this obviously single form has been extensively discussed and sometimes associated to *nyâya* (manner < rule), questioned by Bloch (1914) who does not suggest an alternative. The most convincing etymology is traced by Tessitori (1913; 1914: 226-7), according to whom *nain, nai, nî, ni, ne* is a shortening of *kanhâiN* found in Old Rajasthani texts. *KanhâiN* (<Apabramsha *kaNNahî*) comes from the reconstructed *\*karNasmin* (< Sanskrit *karNe*), a locative form meaning “aside, near”. Trumpp (1872: 401) also gives the original meaning “near” for *nai/ne*. This meaning, according to Tessitori, “may be understood either in the sense of the locative “Near to” or of the accusative-dative “Towards, to”. The second meaning is the origin of the Western marker for goal (Panjabi *nûn*), and the first one of the ergative markers of the *ne* type, clearly a locative.

As for *le/la*, which in Pahari (and modern Nepali) is the agent marker and the instrumental (allomorphs *-l, al, lè*),<sup>31</sup> it is assumed by most to derive from *lagya > lege > lai, le* “having come in touch with”, “for the sake of”, “with the object of” (Juyal 1976). We may notice the similar origin for the dative marker *lâ, la* (Marathi), from *lag*, (> *lâgi*, “up to, for the sake of”), according to Turner (Old Marwari *lag* “up to, until”:<sup>32</sup> it is obvious that both locative and dative, although quite distinct now in most IA languages, stem from a common notion of vicinity and adjacency, presented either as dynamic (entity aimed at: dative, goal or patient) or non dynamic (localizer of the process: ergative).

Originally, both *ne* and *la* markers are then semantically quite close, and these facts make the IA date even closer to the Latin data.

#### Conclusion

The above data for perfect and future compared with experiential patterning, do not of course amount to say that ergative statements are presently perceived as states, no more than was the Latin periphrastic perfect once grammaticized as a perfect. No more did Benveniste’s “possessive” perfect really meant that perfect was perceived as the possession of a result by an agent. But it shows that a similar logic has restructured all predications that were not actual processes (such as processes aimed at or accomplished, or experienced states) into localizing predications. In NIA, most of the localizing predications with two participants came to be represented as non-nominative statements, a historical development which amounted to split grammatical subject properties and syntactic, semantic or pragmatic subject properties on two separate entities.<sup>33</sup> Whereas in Romance languages this gap has been overcome by the “have” restructuring, allowing topic, subject and agent to coincide in a grammatical subject, IA languages, lacking a “have” verb, still display a subjectless patterning for most of these

<sup>31</sup> *hamanle callo mâr cha* [IPL-ERG bird-M.SG strike PRF-M.SG] « we killed the bird »]

*apnâ hâtel khan banuni* [REFL-OBL hand-INSTR food make-PST]“(they) prepared food by their hand”

<sup>32</sup> Against Tiwari, who suggests a possible derivation from *labhati* “acquire, benefit”.

<sup>33</sup> « Coding properties » in Li’s (1976) terms (case marking, agreement), vs syntactic (control), semantic (agentivity, animacy) and pragmatic (topic) properties.

predications.<sup>34</sup> Western NIA is in this respect more “conservative” than Eastern NIA, which has differently restructured its modal and perfect statements into a nominative pattern. Given the historical evolutions above mentioned, useless to say that the relation between unmarkedness and core meaning is to be used cautiously: shall we say that in Hindi/Urdu the preterit is the unmarked form, then, anteriority is the basic meaning for tense, because there is no tense-aspect-person mark, as opposed to present for instance, whereas in Bengali, with a similar history of grammaticization upto the 16<sup>th</sup> century, perfect was already marked by *-l-* and personal endings got added to the form, hence marked more than optative? Still forms are indicative of paths of grammaticization, if not, at least not directly, of the cognitive domains they are supposed to map.

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<sup>34</sup> For a discussion of « subjectless », see Kibrik (1997), and for a view of Hindi as a subjectless language according to these lines see Montaut 2004b.

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