# Remarks on split intransitivity and fluid intransitivity

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#### 1 Introduction

The aim of this paper is to confront the way some types of alignment variations have been dealt with in different frameworks, and to argue that some phenomena extensively discussed in the literature on unaccusativity but largely neglected by typologists (with however the notable exception of Maslova, 2006) are relevant to alignment typology, and necessitate the recognition of a type of fluid intransitivity not identified in classical works on alignment typology.

The paper is organized as follows. In section 2, after recalling the definition of split intransitivity, I review the possible manifestations of split intransitivity, in the coding characteristics of core arguments and in their behavioral properties. In section 3, I briefly discuss several issues in the study of split intransitivity. Section 4 is devoted to a discussion of the relationship between the notions of split intransitivity and unaccusativity. In section 5, devoted to fluid intransitivity, I discuss some illustrations of *pragmatically driven fluid intransitivity*, a particular type of fluid intransitivity accounting in particular for the impersonal construction of French intransitive verbs, and I show that the recognition of this type of alignment variation converges with recent developments in generative studies of unaccusativity.

# 2 Split intransitivity and its manifestations

# 2.1 Alignment, alignment variations, and split intransitivity: definitions

A term T of a construction C and a term T' of a construction C' are *aligned* for a given property if they show the same characteristics with respect to this property. For example, in the East Caucasian language Akhvakh, in the construction illustrated by ex. (1a-c), the single argument of  $be\dot{q}uru\lambda a$  'come' is aligned with the patient of  $bi\dot{\chi}oru\lambda a$  'kill' with respect to case marking and gender-number agreement, but with the agent of  $bi\dot{\chi}oru\lambda a$  'kill' with respect to the variations of the verb in person: the single argument of 'come' is in the absolute case, like the patient of 'kill' (whereas the agent of 'kill' is in the ergative case), it governs variations of the verb in gender and number like

the patient of 'kill', and it governs the variations of the verb in person like the agent of 'kill'.<sup>1</sup>

- (1) Akhvakh (author's field notes)
  - a. *čanaqa w-oq̇-ari* hunter.ABS SGM-come-PFV 'The hunter came'
  - b. *bača b-eq-ari* wolf.ABS SGN-come-PFV
  - c. de-ne w-oq-ada 1SG-ABS SGM-come-PFV.1D/2Q 'I came' (said by a man)
  - d. čanaqasu-de bača b-i¾-āri hunter-erg wolf.ABS SGN-kill-PFV 'The hunter killed the wolf'
  - e. baço-de čanaqa w-uṇ-āri wolf-ERG hunter.ABS SGM-kill-PFV 'The wolf killed the hunter'
  - f. de-de baça b-iҳ-āda 1sg-erg wolf.Abs sgn-kill-pfv.1d/2Q 'I killed the wolf'

In the last decades, the main concern of alignment typology has been the systematic investigation of the alignment of S (single argument of semantically monovalent verbs) with the core terms of the prototypical transitive construction, A(gent) and P(atient).<sup>2</sup> For each property giving rise to a contrast between A and P, S may be aligned with A (*accusative* alignment) or P (*ergative* alignment), or show characteristics different from those of both A and P (*tripartite* alignment).<sup>3</sup>

The intransitive constructions of a given language are not necessarily uniform in their alignment with the prototypical transitive construction, and several types of alignment variations must be distinguished. Alignment variations governed by grammatical characteristics of the verbs or by the nature of the NPs representing their core arguments are commonly termed *split ergativity*. Alignment variations triggered by the

<sup>&</sup>lt;sup>1</sup>A list of the abbreviations used in the glosses of the examples is given at the end of the paper.

<sup>&</sup>lt;sup>2</sup>On the basic notions of classic alignment typology, see a.o. (Dixon, 1994; Lazard, 1994). See (Bickel, forthcoming) for an alternative approach aiming at rectifying some shortcomings of traditional alignment typology. On the necessity of a finer-grained approach to the question of lexically driven alignment splits, see (Nichols, 2008). A particularly controversial issue in alignment studies, which however will not be discussed here, is the possibility to accommodate languages whose transitive constructions are characterized by a *relative hierarchical* type of coding within the classic model of alignment—see in particular (Zúñiga, 2006).

<sup>&</sup>lt;sup>3</sup>As illustrated by the Akhvakh example above, S does not necessarily show the same type of alignment for all of its characteristics, but some combinations are more common that others. For example, the combination of ergative alignment in case marking and accusative alignment in indexation is quite common, whereas the combination of accusative alignment in case marking and ergative alignment in indexation does not seem to be attested. Another well-established generalization about alignment mismatches is that ergative alignment is much more widespread in the coding properties of S, A and P than in their behavioral properties.

TAM value of the verb form are particularly common. For example, in the Kurmanji variety of Kurdish, the S argument of intransitive verbs is uniformly in the nominative, and the verb uniformly agrees with it, whereas A and P show variations in case marking and indexation conditioned by the TAM value of the verb: in some tenses, A in the nominative contrasts with P in the oblique case, and verb agreement is governed by A (hence accusative alignment:  $S = A \neq P$ )—ex. (2a-d), whereas in some others, A in the oblique case contrasts with P in the nominative, and verb agreement is governed by P (hence ergative alignment:  $S = P \neq A$ )—ex. (2e-h).

- (2) Kurmanji (Blau and Barak, 1999)
  - a. Ez dikev-im 1SG fall.PRS-1SG 'I am falling.'
  - b. *Mirov dikev-e* man fall.PRS-3SG 'The man is falling.'
  - c. Ez mirov-î dibîn-im 1SG man-OBL.SGM see.PRS-1SG 'I see the man.'
  - d. *Mirov min dibîn-e*man 1sg.obl see.Prs-3sg
    'The man sees me.'
  - e. Ez ket-im 1SG fall.PFV-1SG 'I fell.'
  - f. *Mirov ket-*Ø man fall.PFV-3SG 'The man fell.'
  - g. *Min mirov dît-*Ø 1SG.OBL man see.PFV-3SG 'I saw the man.'
  - h. *Mirov-î* ez dît-im man-OBL.SGM 1SG see.PFV-1SG 'The man saw me.'

Two other types of alignment variations, commonly termed *split intransitivity* and *fluid intransitivity*, are recognized in recent literature on alignment typology. They have in common that their conditioning does not involve the inflectional characteristics of verbs or the nature of their arguments. For example, in the Papuan language Galela, transitive verbs have two distinct sets of prefixes cross-referencing A and P respectively—ex. (3a-b), whereas intransitive verbs divide into a subclass whose sole argument  $S_A$  is indexed via the paradigm used to index the A argument of transitive verbs—ex. (3c), and a subclass whose sole argument is indexed via the paradigm used to index the P argument of transitive verbs—ex. (3d).

(3) *Galela* (Holton, 2008)

a. *No-wi-doto*A2SG-P3SGM-teach
'You teach him.'

b. *Wo-ni-doto*A3SGM-P2SG-teach
'He teaches you'

c. *No-tagi*A2SG-go
'You are going'

d. *Ni-kiolo*P2sG-be asleep
'You are asleep'

A variety of terms have been used with reference to the type of alignment variations designated here as *split intransitivity*: *split S, unaccusativity, agentive alignment, active-stative alignment, semantic alignment. Split intransitivity* is retained here as the most general, neutral and non-committal term transparently referring to situations in which verbs occurring in intransitive constructions divide into two classes characterized by a contrast in the way their single core argument S is aligned with the two core terms of the transitive construction, A and  $P^4$  In order to avoid terminological problems with terms variously used in different traditions, intransitive verbs whose S argument is aligned with A and intransitive verbs whose S argument is aligned with P will be designated as  $P^4$  and  $P^4$  verbs respectively.

Any contrasting property of the two core arguments of the prototypical transitive construction may be involved in an intransitivity split. Intransitivity splits may involve the coding characteristics of core arguments (case marking, argument indexation, and/or constituent order—*overt* split intransitivity), or their behavior in various syntactic mechanisms (*covert* split intransitivity).

# 2.2 Overt split intransitivity

#### 2.2.1 Split intransitivity in argument indexation

Overt split intransitivity has been reported mainly in predominantly head-marking languages with a split intransitive pattern of argument indexation similar to that of Galela—ex. (3) above. (Boas, 1909) is among the first language descriptions in which an indexation system of this kind is clearly identified. Dakota (Van Valin Jr., 1977) and Guaraní (Gregores and Suares, 1967) are among the best-known examples of split intransitivity manifested in argument indexation.<sup>5</sup>

<sup>&</sup>lt;sup>4</sup>The inconvenience of terms such as *agentive alignment* or *active-stative alignment* is that they refer to possible semantic correlates of split intransitivity, and therefore imply an a priori decision with respect to what constitutes a controversial question in the study of split intransitivity and related phenomena. Even the term *semantic alignment* recently proposed by S. Wichmann (Donohue and Wichmann, 2008) can be criticized from this point of view, since it excludes the very possibility of purely lexical (i.e., semantically arbitrary) intransitivity splits—see section 3.3.2. The relationship between the notions of *split intransitivity* and *unaccusativity* will be discussed in section 4.

<sup>&</sup>lt;sup>5</sup>More complex indexation patterns, with three indexation possibilities for S arguments and variations in the indexation of A and O that complicate the identification of alignment patterns, have also

#### 2.2.2 Split intransitivity in case marking

Split intransitivity in case marking can be illustrated by Nepali (Li, 2007), Georgian (Van Valin Jr., 1990; Lazard, 1995), or Basque. Most Basque intransitive verbs have their single argument in the same absolute case as the P argument of transitive verbs, but Basque also has a minor class of intransitive verbs that assign ergative case to S—ex. (4).

#### (4) Basque

- a. Gizon-ak ur-a edan du man-sg.erg water-sg.abs drink.pfv aux.prs.p3sg.a3sg 'The man has drunk the water.'
- b. Gizon-a etorri da man-SG.ABS come.PFV AUX.PRS.S3SG 'The man has come.'
- c. *Ur-ak irakin du* water-sg.erg boil.pfv AUX.prs.p3sg.A3sg 'The water has boiled.'

#### 2.2.3 Split intransitivity in constituent order

In languages with a rigid AVP or PVA constituent order in the transitive construction, the choice between SV and VS may constitute a manifestation of split intransitivity, as claimed by Donohue (2008) for Ambonese Malay—ex. (5).

- (5) Ambonese Malay (Donohue, 2008)
  - a. Dorang cari betang konco 3PL search\_for my friend.' 'They are looking for my friend.'
  - b. Betang konco su-bajaang my friend PFV-walk 'My friend walked away.'
  - c. Su-jato betang konco
    PFV-fall my friend
    'My friend has fallen over.'

Note however that SV~VS alternations are rarely rigidly determined by the choice of individual intransitive verbs, and more commonly involve pragmatically governed *fluid* intransitivity—see section 5.

# 2.3 Covert split intransitivity

In principle, any contrast in the behavior of the two core arguments of transitive verbs can be involved in an intransitivity split. In this section, after illustrating the notion of covert split intransitivity with the example of Nahuatl impersonalization, I enumerate

the best-known manifestations of covert split-intransitivity (discussed in the generative literature as 'unaccusativity diagnostics'), and I add two examples of lesser known phenomena that may be involved in intransitivity splits. Several phenomena currently mentioned as possible 'unaccusativity diagnostics' are however not mentioned in this section. The reason is that, either they cannot be defined in terms of a contrast between S alignment with A and S alignment with P (see section 4.2), or they involve *fluid* intransitivity rather than *split* intransitivity (see section 5).

#### 2.3.1 Nahuatl impersonalization

Nahuatl has no case contrast between A and P, and uniformly uses the same prefixes to index the A argument of transitive verbs and the S argument or intransitive verbs, but shows an intransitivity split in the way to encode unspecific S arguments.

Nahuatl has two distinct morphological devices to encode unspecific agents (passivization by means of the suffix -lo) and unspecific patients (the so-called indefinite object prefixes tla- and  $t\bar{e}$ -), and shows a tripartite split with respect to the morphological operations used to encode unspecific S arguments of intransitives: with some intransitive verbs, unspecific S is encoded via the same passive suffix -lo as A—ex. (6a-b), with some others, unspecific S is encoded via the same 'introversive' prefix tla- as an inanimate P—ex. (6c-d), and a third group of intransitive verbs uses a special impersonal suffix -hua—ex. (6e-f) (Launey, 1981, 1994).

- (6) Nahuatl (Launey, 1981)
  - a. *Mayāna* in pilli A3SG.be\_hungry.PRS DEF child 'The child is hungry.'
  - b. Mayāna-loA3SG.be\_hungry-PASS.PRS'People are hungry.'
  - c. *Popōca* in tepetl
    A3SG.smoke.PRS DEF mountain
    'The mountain is smoking.'
  - d. *Tla-popōca*A3SG.INTRV-smoke.PRS
    Something is smoking.'
  - e. *Tzàtzi in pilli*A3SG.scream.PRS DEF child
    'The child is screaming.'
  - f. *Tzàtzī-hua*A3SG.scream-IMPERS.PRS
    'Somebody is screaming'

#### 2.3.2 Other possible manifestations of covert split intransitivity

The following manifestations of covert split intransitivity have been widely discussed in the literature:

- Impersonal passives: In languages in which passive morphology can be used to block the expression of the A argument of transitive verbs without affecting the expression of the P argument, the same operation may apply to the S argument of a subclass of intransitive verbs (Perlmutter, 1978). The possibility to passivize 'unergative' intransitive verbs but not 'unaccusative' ones has been noted by Rice (1991) for the Athapaskan language Slave.
- The syntax of resultatives: In English and some other languages, a resultative phrase can be predicated of the P argument of transitive verbs, or of the S argument of a subclass of intransitive verbs, but cannot be predicated, either of the A argument of transitive verbs, or of the S argument of another subclass of intransitive verbs (Levin and Rappaport Hovay, 1995).
- The attributive use of past participles: In several Germanic and Romance languages, past participles of transitive verbs can modify a head noun semantically identified to the P argument (as in English *uneaten food* vs. \*uneaten man). The past participle of a subclass of intransitive verbs can combine in the same way with a head noun identified to the S argument (unfallen leaves), whereas with another subclass of intransitive verbs, the attributive use of the past participle is impossible (\*unrun jogger)—see (Levin and Rappaport Hovay, 1986). A similar split, involving the attributive use of verb forms including aspectual suffixes, has been described in Japanese—see (Kishimoto, 1996).
- Russian bare po-phrases: In Russian, with transitive verbs, distributive bare pophrases can occur only in P role, and intransitive verbs divide into a subclass that accepts distributive po-phrases in S role, and a subclass that does not accept them (Pesetsky, 1982; Schoorlemmer, 2004).
- German split phrases: According to (Grewendorf, 1989), in German, NPs where the head and its dependents are separated are allowed in P role, and also in S role with a subclass of intransitive verbs, but not in A role, nor in S role with another subclass of intransitive verbs.<sup>6</sup>
- Germanic 'what-for' split: According to (Grewendorf, 1989), the German 'what-for' construction is possible with nouns in P role, and also in S role with a subclass of intransitive verbs, but not with nouns in A role, or in S role with another subclass of intransitive verbs. Similar observations have been made on other Germanic languages (Dutch, Swedish).
- Possessor raising: In some languages in which an external possessor can refer to the P argument of a transitive verb, it has been claimed that intransitive verbs divide into two subclasses according to the possibility to be constructed with an external possessor referring to their S argument—see in particular (Borer and Grodzinsky, 1986) on Hebrew.

<sup>&</sup>lt;sup>6</sup>Note that Grewendorf's analysis has been challenged by De Kuthy (2002), who argues that the semantic roles assigned by the verb do not constitute the decisive factor in the conditioning of this phenomenon.

• Noun incorporation: In languages having a productive mechanism of noun incorporation, transitive verbs can incorporate their P argument, but not their A argument, and intransitive verbs may divide into a subclass whose S argument can be incorporated in the same way as P, and another subclass with which S incorporation is impossible— see (Baker, 1988); see also (Rice, 1991) on the Athapaskan language Slave.

Lesser known manifestations of covert split intransitivity include the following two:

- Northern Mande nominalization: Several Northern Mande languages make a distinction between two varieties of genitival construction: inalienable genitive modifiers immediately precede their head, whereas alienable genitive modifiers are marked by a postposition. When transitive verbs are nominalized, A is encoded like an alienable genitive modifier, whereas P is encoded like an inalienable genitive modifier, and in at least some Northern Mande languages, the S argument of some intransitive verbs is treated in nominalization in the same way as A, whereas with other intransitive verbs, the behavior of S in nominalization aligns on that of P—see in particular (Lüpke, 2005, 327–347) on Jalonke.
- Halkomelem Salish desideratives: According to (Gerdts, 1991) Halkomelem Salish has a desiderative derivation that modifies the semantic role of the A argument of transitive verbs in the same way as the *want to V* construction of English. The same derivation is possible for a subclass of intransitive verbs but is impossible for others, even in cases in which the *want to V* construction would be fully acceptable in English (for example, Halkomelem Salish uses the desiderative derivation to express 'I want to go', but cannot use it to express 'I don't want to get lost'—(Gerdts, 1991, 236–237)).

# 3 Issues in the study of split intransitivity

# 3.1 Inconsistencies in the recognition of intransitivity splits

The typological and generative traditions share the same bias in the way they deal with predominantly ergative and predominantly accusative languages. In predominantly ergative languages having a minor class of verbs whose construction involves an argument having the coding characteristics of A but no argument with the coding characteristics of P (which is for example the case of Basque), no typologist hesitates to recognize an intransitivity split with a minor class of intransitive verbs following accusative alignment, and generativists immediately identify a subclass of 'unergative' verbs. But when the symmetrical situation is found in predominantly accusative languages (for example, in languages like Latin, German or Russian that have a minor class of 'impersonal' constructions involving an accusative NP but no nominative NP), the possibility to analyze it in terms of split intransitivity or unaccusativity is generally neglected. There are however some notable exceptions, in particular (Moravcsik, 1978).<sup>7</sup>

<sup>&</sup>lt;sup>7</sup>In this article, devoted to manifestations of ergativity in predominantly accusative languages, E. Moravcsik recognizes "accusatively marked intransitive subjects" (and consequently, ergative align-

Ex. (4c), reproduced here as (7), illustrates a monovalent verb of Basque whose sole argument is encoded like the A argument of transitive verbs, contrary to the general rule of ergative alignment. Ex. (8) illustrate the symmetric case of a monovalent verb of Russian whose sole argument, in contradiction with the general rule of accusative alignment, is encoded like the P argument of a transitive verb.

(7) Basque
Ur-ak irakin du
water-SG.ERG boil.PFV AUX.PRS.P3SG.A3SG

(8) Russian Menja tošnit 1SG.ACC feel\_nauseous.PRS.3SG 'I feel nauseous.'

'The water has boiled.'

Basque verbs like those illustrated by ex. (7) are termed 'unergatives' by generativists, which may suggest that they constitute the mirror image of the unaccusative verbs identified in the other European languages. But in fact, they constitute the exact mirror image of the Russian (or Latin, German, etc.) impersonal verbs with a unique argument represented by an accusative NP, like the Russian verb of ex. (8), which are never mentioned in discussions of unaccusativity.

In the typological tradition, it is commonly admitted that the subclass of Basque intransitive verbs with S in the ergative case constitutes an instance of split intransitivity; at the same time, many a typologist would probably disagree with the proposal to analyze in a symmetric way the Russian verb of ex. (8), because this verb shows what could be the trace of 3rd person singular A argument. But accepting this objection implies putting expletive subjects and default agreement marks on a par with NPs or bound pronouns representing arguments in the definition of alignment types, and the same line of argument should be applied to the  $S_A$  verbs of Basque. The construction of these verbs includes the transitive auxiliary in the form that normally implies a 3rd person singular P argument, and therefore can be viewed as an exception to the ergative alignment rule only if expletive subjects and default agreement marks are distinguished from referential NPs and bound pronouns in the identification of alignment patterns. Recognizing *overt* split intransitivity in Basque but not in Russian (or German, or Latin) is therefore totally inconsistent.

Note that even in Romance languages, exceptional valency patterns including an argument fully aligned with P but no argument aligned with A are not totally unknown. In French, *falloir* 'need' cannot occur in a canonical construction with a subject NP and does not inflect for person—ex. (9).

#### (9) French

a. *Il me faut ces livres*A3SGM D1SG need.PRS.3SG DEM.PL book.PL
'I need these books.'

ment) in constructions including an experiencer in the accusative such as Old English *Mec longade*, 'I longed' (lit. 'Me longed'), Latin *Pudet me* 'I am ashamed' (lit. 'Shames me'), or German *Es friert mich* 'I am cold' (lit. 'It freezes me').

b. Ces livres, il me les faut

DEM.PL book.PL A3SGM D1SG P3PL need.PRS.3SG

'These books. I need them.'

c. \* Ces livres me fallent
DEM.PL book.PL D1SG need.PRS.3PL

Whatever the analysis of expletive subjects, the absence of an argument represented by an NP showing the same properties as A in the prototypical transitive construction, and the presence of an argument fully aligned with P, make this construction comparable to the constructions involving an S argument aligned with P in languages in which overt split intransitivity is traditionally recognized.

# 3.2 Variations in the size and productivity of subclasses of intransitive verbs

As mentioned by (Merlan, 1985), in languages having split intransitive systems, the size of the two subclasses of intransitive verbs varies a good deal. Some languages (for example, Basque) have a small class of  $S_A$  verbs and a large class of  $S_P$  verbs, others (for example, the Saharan language Beria—(Jakobi and Crass, 2004)) have a small class of  $S_P$  verbs and a large class of  $S_A$  verbs, and in other languages, both classes are numerically important. French and Occitan, with just one verb whose construction includes an argument fully aligned with P but cannot include an argument aligned with A (section 3.1), illustrate the borderline case of languages in which a class of verbs characterized by exceptional alignment properties includes just one member.

### 3.3 The semantic correlates of split intransitivity

Leaving apart for the moment the pragmatic conditioning characteristic of situations involving *fluid* intransitivity rather than *split* intransitivity (section 5), two semantic features have been put forward as semantic correlates of split intransitivity: agentivity and verbal lexical aspect (Aktionsart).

#### 3.3.1 Semantically motivated intransitivity splits

Agentivity is a cluster concept, and the distinction between  $S_A$  and  $S_P$  verbs may be sensitive to various aspects thereof. For example, verbs expressing non-volitional bodily processes allowing for some degree of control (such as 'cry') belong to the  $S_A$  class in some languages, and to the  $S_P$  class in some others.<sup>8</sup>

Verbal lexical semantics has been reported to condition split intransitivity in three possible ways, which according to the Dowty/Vendler classification of verbs can be defined as follows:

<sup>&</sup>lt;sup>8</sup>The ambiguous status of such verbs from the point of view of agentivity is apparent in the fact that, out of context, their imperative positive (e.g., *Cry!*) sounds somewhat strange, whereas their imperative negative (e.g., *Don't cry!* or *Stop crying!*) sounds perfectly normal. By contrast, *Sweat!* and *Stop sweating!* are equally anomalous. Another possible criterion is that *feign to be crying* is semantically perfectly normal, whereas for example *feign to be sweating* is semantically problematic.

- (a) states vs. activities ~ achievements ~ accomplishments (or [±stative])
- (b) states ~ activities vs. achievements ~ accomplishments (or [±telic])
- (c) activities vs. states ~ achievements ~ accomplishments

The third possibility has been advocated by Van Valin as an explanation of auxiliary selection in Italian, but also of the intransitivity split of Georgian (Van Valin Jr., 1990), and the second possibility can be illustrated by auxiliary selection in Dutch (see van Hout, 2004, among others). In other words, if one accepts the distinction put forward here between split intransitivity proper and variations in the behavior of intransitive verbs that cannot be straightforwardly formulated in terms of alignment variation, these two possibilities are rather marginal as possible explanations of split intransitivity proper. Uncontroversial cases of semantically motivated split intransitivity are regularly conditioned, either by the [±agentive] distinction in argument structure, or by the [±stative] distinction in lexical aspect.<sup>9</sup>

Mithun (1991) analyzes the semantic basis of split intransitivity in Guaraní, Lakhota (a dialect of Dakota), Central Pomo (from the Pomoan family), Caddo (from the Caddoan family), and Mohawk (from the Iroquoian family), and the wider sample of Northern Amerindian languages she takes into consideration in (Mithun, 2008) confirms the validity of the hypotheses put forward in the former study.  $^{10}$ 

Concerning Guaraní, Mithun concludes that  $S_A$  verbs denote events (activities, accomplishments, and achievements), whereas  $S_P$  verbs denote states, and that consequently this system, "based primarily on a distinction of lexical aspect, could thus be accurately identified as active-stative".

In the case of Lakhota, Mithun shows that the [ $\pm$ stative] distinction plays no role in the intransitivity split, and that S arguments aligned with A typically perform, effect, instigate and control events, while S arguments aligned with P are typically affected. Central Pomo and Caddo are similar, with however differences in the particular aspects of agentivity (volitionality, control, affectedness, ...) relevant to the classification of intransitive verbs into  $S_A$  verbs and  $S_P$  verbs. Mohawk can also be described as having an intransitivity split whose semantic correlate is agentivity, but in which this original motivation has been somewhat blurred by processes of grammaticalization and lexicalization.

An important aspect of Mithun's study is that she shows how the semantic parameters underlying split intransitivity may evolve, giving rise to apparent exceptions to the predominant regularity.

Recent studies have considerably enlarged the documentation on split intransitivity (in particular among the languages of the Pacific). They have revealed additional cases of split intransitivity conditioned by the [±stative] feature—for example, the Papuan language Galela (Holton, 2008), but on the whole they confirm the preponderance of agentivity in the semantic conditioning of intransitivity splits. For example,

<sup>&</sup>lt;sup>9</sup>I am aware of only two cases of overt split intransitivity that have been claimed to be conditioned by telicity: Georgian and Nepali.

<sup>&</sup>lt;sup>10</sup>On the semantic basis of split intransitivity in Northern Amerindian languages, see also (Hardy and Davis, 1993) on the Muskogean language Alabama.

(Klamer, 2008) provides an overview of split intransitivity in ten languages from Indonesia, from which it follows that semantic features of the arguments are relevant in all languages of the sample, whereas verbal aspect plays a role in two of them only.

More or less complex cases of interaction of agentivity and lexical aspect have been reported too. For example, Li 2007 argues that the intransitivity split of Nepali follows from the interaction of agentivity and telicity.<sup>11</sup>

#### 3.3.2 Semantically arbitrary intransitivity splits

The semantic motivation of intransitivity splits may be less transparent than in the cases mentioned in the preceding section. Some languages seem to have a relatively homogeneous small class contrasting with a large class semantically heterogeneous (see for example (Michailovsky, 1997) on Limbu, a Tibeto-Burman language of Nepal).

On the question of the relative size of the subclasses of  $S_A$  and  $S_P$  intransitive verbs, R. Pustet rightly observes that "this aspect of the structure of split-S systems has been widely neglected" (Pustet, 2002, 383), and argues that this parameter is crucial in the semantic analysis of intransitivity splits. She shows that the two related languages Lakota and Osage, in spite of having intransitivity splits based on the same semantic feature of agentivity, greatly differ in the relative size of the two subclasses of intransitive verbs: Osage has much more  $S_A$  verbs and much less  $S_P$  verbs than Lakota, and many cognate verb stems are categorized as  $S_P$  verbs in Lakota, but as  $S_A$  verbs in Osage, for example Lakota c g c g vs. Osage c g c g c g 'tremble'. The explanation proposed is that "multifactor concepts like agency are per se scalar concepts", and that consequently, vacillations in the categorization of S arguments of intransitive verbs as [+agentive] are normal. One of the two subclasses of  $S_A$  verbs and  $S_P$  verbs can therefore behave as a default class grouping all intransitive verbs that do not assign prototypical agenthood or prototypical patienthood to their S argument.

The possibility of purely lexical intransitivity splits (i.e., intransitivity splits devoid of any semantic consistency) should be considered at least when the two subsets of intransitive verbs are of a very unequal numerical importance. In particular, Trask explicitly argued that the subclass of Basque S<sub>A</sub> verbs is "semantically arbitrary" (Trask, 1997, 111), and constitutes nothing more than a collection of isolated historical accidents without any connection between themselves. Doubts about the possibility to find a semantic motivation of an intransitivity split have also been expressed for Kali'na, a Cariban language of French Guyana (Renault-Lescure, 2001-2002)

Semantically arbitrary intransitivity splits involving a minor subclass of intransitive verbs with an exceptional alignment pattern may result from the decay of previously semantically motivated intransitivity splits, with a limited subclass of intransitive verbs constituting vestiges of a type of behavior formerly productive, but that the evolution tends to eliminate. An alternative explanation is the emergence of a split alignment pattern due to the accumulation of isolated evolutions affecting individual intransitive verbs but having in common that they create exceptions to the predominant alignment pattern.

<sup>&</sup>lt;sup>11</sup>Nepali seems to be a particularly complex case: according to (Butt and Poudel, 2007), some aspects of the distribution of the ergative case in Nepali for which no explanation had previously been offered can be explained with reference to the notions of stage-level vs. individual level predication. Note that the variations they analyze constitute an instance of *fluid* intransitivity rather than *split* intransitivity.

#### 3.4 The diachrony of split intransitivity

As discussed in Holton, Malchukov and Mithun's papers included in (Donohue and Wichmann, 2008), in predominantly accusative languages, split intransitivity may result from the reanalysis of 'transimpersonal' constructions, i.e., of constructions that have the appearance of transitive constructions, but involve a dummy A pronoun or default A agreement and a unique core argument encoded like the P argument of prototypical action verbs.

In predominantly ergative languages, split intransitivity may develop as the result of the coalescence of light verb compounds, as discussed for Lezgian by (Haspelmath, 1993). The Mayan languages Chol and Chontal are another case in point. As discussed by (Vázquez Álvarez, 2002), (Gutiérrez Sánchez, 2004) and (Gutiérrez Sánchez and Zavala Maldonado, 2005), Chol and Chontal have an intransitivity split in S indexation with a class of  $S_A$  inflected analytically, whereas  $S_P$  verbs are inflected via affixes, and this situation results from the grammaticalization of light verb constructions.

The grammaticalization of aspectual periphrases has also been reported as a possible source of split intransitivity—see (Danziger, 1996) on the Mayan language Mopan.

# 4 Split intransitivity and unaccusativity

# 4.1 Split intransitivity in generative syntax and the Unaccusative Hypothesis

Split intransitivity has attracted the attention of linguists working within very different theoretical frameworks. Sapir (1917) initiated a tradition with a marked typological orientation, which concentrates on cases of *overt* split intransitivity, i.e., split intransitivity apparent in the coding characteristics of S (case marking and/or verb agreement), and tends to neglect *covert* split intransitivity, i.e., split intransitivity manifested in some aspects of the behavior of S in languages in which the coding characteristics of S do not depend on the choice of a particular intransitive verb. The generative tradition was initiated by Perlmutter (1978) within the framework of relational grammar, and by Burzio (1986) within the GB paradigm. At its beginning, it was mainly concerned with the discussion of the *Unaccusative Hypothesis*.

*Unaccusativity* primarily refers to a possible syntactic explanation of split intransitivity within the frame of multistratal theories of syntax, according to which "the single argument of unaccusative verbs is an underlying object, and thus displays many syntactic properties of direct objects of transitive verbs", whereas "the single argument of unergative verbs is a subject at all levels of representation, and thus displays the same syntactic behavior as the subject of transitive verbs" (Sorace, 2004)

# 4.2 'Unaccusativity diagnostics' that are not straightforwardly interpretable in terms of alignment variations

A problem with the notion of unaccusativity is that it is not limited to phenomena straightforwardly definable in terms of alignment variations ( $S = A \neq P \ vs. \ S = P \neq A$ ).

'Unaccusativity diagnostics' also include variable properties of intransitive constructions that cannot be defined in terms of alignment of S with one of the core terms of the transitive construction.

#### 4.2.1 Auxiliary selection

Auxiliary selection in Germanic and Romance languages is one of the most popular unaccusativity diagnostics. However, in spite of several proposals to establish a connection, many authors acknowledge that it remains unclear why auxiliary selection should be sensitive to a distinction between intransitive verbs whose S argument is an underlying A and intransitive verbs whose S argument is an underlying P (see a. o. Levin and Rappaport Hovay, 1995).

In the languages in question, the perfect auxiliary in transitive constructions is invariably *have*, and it would simply be nonsensical to try to describe auxiliary selection as based on a contrast between A triggering the choice of *have* and P triggering the choice of *be*, with extension to S along a split intransitive pattern. Therefore, whatever the possibility to establish a connection between unaccusative syntax and the selection of *be* is, it should be clear that auxiliary selection cannot be described as a contrast between  $S_A$  verbs and  $S_P$  verbs. Consequently, there is no a priori reason to expect that subclasses of intransitive verbs established on the basis of auxiliary selection should coincide with subclasses of intransitive verbs established on the basis of distinctions straightforwardly involving intransitivity splits. For detailed analyses and discussions, see (Legendre and Sorace, 2003; Sorace, 2004; Bentley, 2006; Aranovich, 2007), and references therein.

#### 4.2.2 Inflectional classes of intransitive verbs

Some languages have an inflectional class of stative verbs, and this has sometimes been proposed as an unaccusativity diagnostic (see (Kræger, 1990) on the Philippine-type language Kimarangang Dusun). However, if the inflectional distinction does not correlate with a variation in the way S is aligned with A or P, it cannot be described as a contrast between  $S_A$  verbs and  $S_P$  verbs.

#### 4.2.3 Variations in the transitivization properties of intransitive verbs

In some languages, intransitive verbs divide into two sub-classes with respect to the possibility of being used in a transitive construction. For example, English causative alternation, in which the same verb can be used transitively and intransitively with the meaning equivalence  $\mathbf{V}(x, y) = \mathbf{Caus}(x, \mathbf{V}(y))$ , has been claimed to be an unaccusativity diagnostic (see a.o. Levin and Rappaport Hovav, 1995, 79–178).

According to (Rice, 1991), Athapaskan languages have a causative derivation that can apply to any intransitive verb in some Athapaskan languages (for example, Navajo), whereas in some others (for example, Slave), its occurrence is limited to a subclass of intransitive verbs.

A variant of this situation is found in languages such as Fijian (Dixon, 1988), in which the general rule is that transitive verbs are overtly derived from intransitive ones by the addition of a transitivizing suffix, and intransitive verbs divide into two classes

with respect to the effect of the morphological operation of transitivization on argument structure: either A bears the same semantic role as S, and an additional P argument is introduced, or P bears the same semantic role as S, and a causer is introduced in A role.

Similar situations are discussed by Austin (1997) for several Australian aboriginal languages, and by Danziger (1996) for three languages of the Yucatecan branch of the Mayan family (Yucatec, Lacandon, and Itzaj). As explicitly stated by E. Danziger for Yucatecan languagues, such splits may be motivated by the same distinctions in lexical aspect or argument structure as true intransitivity splits in other languages, and it is reasonable to investigate possible connections. However, the ability of the S argument of an intransitive verb to be converted into the A or P argument of a transitive verb is a derivational property of intransitive verbs, not a characteristic of the intransitive construction, and it cannot be compared with similar derivational properties of the core arguments of the transitive construction, since by definition, transitivization cannot apply to transitive constructions. Therefore, such variations cannot be described in terms of alignment of the intransitive construction with the transitive construction.

#### 4.3 Unaccusative verbs, or unaccusative syntax?

An important part of the literature on unaccusativity is devoted to 'unaccusativity mismatches'. Interestingly, many of them involve phenomena that do not have the same status with respect to split intransitivity in the strict sense of this term. For example, (Gerdts, 1991) describes a mismatch between the classification of the intransitive verbs of Halkomelem Salish according to their behavior in the formation of causatives and desideratives. But, as argued above, the formation of desideratives as described by (Gerdts, 1991) is an uncontroversial case of split intransitivity, whereas the variable behavior of intransitive verbs in causativization cannot be viewed as an alignment split.

A thorough examination of 'unaccusativity mismatches' has resulted in that a growing proportion of studies devoted to phenomena considered as possible manifestations of unaccusativity have started expressing doubts about the possibility to explain this rather heterogeneous set of variable properties of intransitive verbs within the frame of the Unaccusative Hypothesis as it was initially formulated. In particular, recent generative studies of unaccusativity tend to focus rather on the representation of *unaccusative syntax* (i.e., on the configurations likely to account for constructions in which the S argument of intransitive verbs shows properties typical of objects), without necessarily postulating that unaccusative syntax should be reserved to a subclass of 'unaccusative' intransitive verbs. For example, recent studies of the impersonal construction of French intransitive verbs have concluded that this construction has 'unaccusative syntax', but does not involve a division of intransitive verbs into two classes—see in particular (Cummins, 2000). Some aspects of this question will be developed in the following section.

# 5 Fluid intransitivity and presentational focus

#### 5.1 Semantic vs. pragmatic fluid intransitivity

The difference between fluid-S systems and split-S systems is that, in fluid-S systems, the choice of S alignment cannot be described as involving a division of intransitive verbs into two subclasses. Until recently, the only type of fluid intransitivity discussed in the typological literature was a type in which the choice of S alignment depends on the semantic feature of control (Dixon, 1994, 78–83). What distinguishes such fluid-S systems from the commonest type of split-S systems is that the semantic nature of the verb does not entirely determine the choice of S alignment: in fluid systems, the S argument of the same intransitive verb may align either with A or with P, depending on the degree to which the referent of the S NP controls the activity in the particular event referred to. Acehnese, a western Austronesian language from Sumatra, is one of the best-known and most cited cases of control-driven fluid intransitivity (Durie, 1985).

On the basis of Dogon and Tundra Yukaghir data, Maslova (2006) proposes the recognition of *focus-oriented split intransitivity*. Tundra Yukaghir has a marker *leŋ* with the following distribution: in transitive predication, regardless of information structure, it attaches to P and is incompatible with A—ex. (10a-b), whereas in intransitive predication, it attaches to S if and only if S is focalized—ex. (10c-d).

- (10) Tundra Yukaghir (Maslova, 2006)
  - a. met ten'i n'awn'iklie-len tonore-men 1sG here polar\_fox-len chase-PFV.1/2sG 'I have been chasing A POLAR FOX here.'
  - b. nime-le aq pajp wie-nun dwelling-LEn only woman.SG make-HAB(AFOC) 'Only WOMEN install dwellings.'
  - c. ... qahime-leŋ kelu-l raven-Leŋ came-SFOC '... A RAVEN came.'
  - d. qad'ir apanala: me-kelu-j
    DISC old\_woman AFF-come-STOP
    'The old woman CAME.'

The term used by Maslova is somewhat misleading, since the phenomenon in question does not involve a division of intransitive verbs into two subclasses, and therefore constitutes a type of *fluid* intransitivity which differs from the type traditionally recognized in the typological literature by the pragmatic nature of its conditioning.

In the following sections, I show that, in a typological perspective, the notion of pragmatically driven fluid intransitivity also accounts for some phenomena widely discussed in the literature on unaccusativity, but so far neglected by typologists.

# 5.2 French as a 'fluid-S' language

French intransitive verbs have an impersonal construction of a type which is found in Northern Italian dialects (Saccon, 1993), but has no exact equivalent in most other Romance languages. In this construction, illustrated by ex. (11), the S argument appears

in postverbal position (i.e., in the canonical P position), does not govern verb agreement, and more generally shows no evidence of having any of the properties that, in the transitive construction, distinguish A from P.

#### (11) French

- a. *Une femme viendra*INDEF.SGF woman.SG come.FUT.3SG
  'A woman will come.'
- b. *Il viendra une femme*A3SGM come.FUT.3SG INDEF.SGF woman.SG
  lit. 'It will come a woman', same denotative meaning as (a), but with a different perspective (something like 'There will be a woman coming').

As illustrated by ex. (12) to (14), in this construction, the postverbal NP representing the subject argument of an intransitive verb patterns with P with respect to a range of properties that are not shared by A: *en*-cliticization—ex. (12), combinability with restrictive *que*—ex. (13), possibility to take the determiner *de* in negative environments—ex. (14), etc.

#### (12) French

- a. Le garçon a mangé trois pommes

  DEF.SGM boy.SG AUX.PRS.3SG eat.PTCP three apple.PL

  (The boy stathmes apples)
  - 'The boy ate three apples.'
  - → Le garçon en a mangé trois 'The boy ate three of them.'
- b. Trois garçons ont vu ce film three boy-PL AUX.PRS.3PL see.PTCP DEM.SGM movie.SG

'Three boys have seen this movie.'

- → \* Trois en ont vu ce film intended: 'Three of them have seen this film' (OK: Trois ont vu ce film, or Il y en a trois qui ont vu ce film)
- c. Trois garçons sont entrés three boy-PL AUX.PRS.3PL enter.PTCP.PLM
  - 'Three boys entered.'

    → \* Trois en sont entrés

intended: 'Three of them entered' (OK: *Trois sont entrés*, or *Il y en a trois qui sont entrés*)

- d. *ll* est entré trois garçons A3SGM AUX.PRS.3SG enter.PTCP.SGM three boy.PL
  - 'Three boys entered.'
  - → Il en est entré trois

'Three of them entered.'

#### (13) French

a. Jean n'a invité que Marie Jean NEG-AUX.PRS.3SG invite.PTCP RESTR Marie 'Jean invited only Mary.'

b. \* Que Jean n'a invité Marie
RESTR Jean NEG-AUX.PRS.3SG invite.PTCP Marie
intended: 'Only Jean invited Mary.' (OK: Il n'y a que Jean qui a invité Marie)

- c. \* Que Jean n'est venu
  RESTR Jean NEG-AUX.PRS.3SG come.PTCP.SGM
  intended: 'Only Jean came.' (OK: Il n'y a que Jean qui est venu)
- d. // n'est venu que Jean
  A3SGM NEG-AUX.PRS.3SG come.PTCP RESTR Jean
  'Only Jean came.'

#### (14) French

- a. Jean n'a pas mangé de pommes Jean NEG-AUX.PRS.3SG NEG eat.PTCP DE apple.PL
- b. \* De garçons n'ont pas vu ce film

  DE boy.PL NEG-AUX.PRS.3PL NEG see.PTCP DEM.SGM movie.SG

  intended: 'No boy saw this movie' (OK: Il n'y a pas de garçon qui ait vu ce film)
- c. \* De garçons ne sont pas entrés

  DE boy.PL NEG AUX.PRS.3PL NEG come\_in.PTCP.PLM

  intended: 'No boy came in.' (OK: Il n'y a pas de garçon qui soit entré)
- d. *Il n'est pas entré de garçons*A3SGM NEG-AUX.PRS.3SG NEG come\_in.PTCP DE boy.PL
  'No boy came in.'

The only evidence against identifying the postverbal NP as fulfilling the syntactic role of object is that it cannot be represented by an object clitic pronoun. But this impossibility can be viewed as a mere consequence of the 'thetic' (or 'existential', 'presentational') meaning of the construction. This pragmatic function, repeatedly underscored in the literature (whatever the terms used to characterize it) is sufficient to explain the impossibility to cliticize the postverbal NP, since weak pronouns cannot be used to introduce new referents. There is to my knowledge no convincing evidence against the analysis according to which the postverbal NP fulfills the same *syntactic* role as the postverbal patient NP in the prototypical transitive construction, but the *discourse* value of the construction blocks the manifestation of objectal properties implying a topical status of the object.

The theory according to which the postverbal NP in the French impersonal construction of intransitive verbs fulfills the *syntactic* role of object, in spite of being assigned the same *semantic* role as the subject of the same verb in a canonical predicative construction, is not new in French syntax: it was already advocated by Brunot  $(1926)^{12}$  and it has been re-discovered recently by formal syntacticians. For example, Cummins

<sup>&</sup>lt;sup>12</sup>Although he explicitly analyzed the postverbal NP in the impersonal construction of French intransitive verbs as an object, Brunot proposed to designate it by the non-committal term *séquence impersonnelle* ('impersonal sequence'), in order to avoid controversy. This term was subsequently adopted by many French grammarians. Its descriptive adequacy is unquestionable; however, it suggests that the impersonal construction involves a grammatical relation that cannot be assimilated to any of the grammatical relations recognized in other constructions, which is certainly not what Brunot had in mind when he introduced it.

(2000) concludes her analysis of this construction by stating that French has "two basic types of intransitive clauses: subject-verb and verb-object". Although she does not state it explicitly, this implies recognizing the impersonal construction of French intransitive verbs as an instance of ergative alignment.

In addition to that, contrary to an opinion popularized by early studies within the frame of the Unaccusative Hypothesis, the impersonal construction is not restricted to a limited subset of 'unaccusative' intransitive verbs. As shown a.o. by (Cummins, 2000) on the basis of the corpus provided by (Hériau, 1980), the list of the 50 most frequent verbs in this construction also includes several typically 'unergative' verbs, and no semantic subclass of intransitive verbs can be considered as absolutely excluded from this construction. The fact that some intransitive verbs (including 'unergative' ones) occur with a particular frequency can be satisfactorily explained by the mere fact that their lexical meaning is "highly compatible with the 'presentational' value of the I[mpersonal] C[onstruction], expressing appearance or existence at location" (Cummins, 2000, 239), and with intransitive verbs of other semantic classes, whose compatibility with the impersonal construction may at first sight seem questionable, the presence of a locative complement improves the acceptability of the impersonal construction.

If one accepts this analysis of the impersonal construction of French intransitive verbs with a postverbal NP representing the S argument, from a typological point of view, the only possible conclusion is that French is a *fluid-S* language, but with a pragmatic conditioning of fluid intransitivity similar to that described by Maslova for Tundra Yukaghir. In the French type of fluid intransitivity, ergative alignment is not triggered by the semantic feature [-control], but rather has the pragmatic function of expressing a 'presentational' (or 'thetic', 'existential') organization of predication.

The functional motivation of the French type of fluid intransitivity can be analyzed as follows: in the transitive construction, A is typically more topical than P, and new referents are typically introduced in P position; consequently, in a language in which accusative alignment predominates, it is natural to de-topicalize S by means of a construction in which S is aligned with P. According to Lambrecht,

"S[entence] F[ocus] marking involves cancellation of those prosodic and/ or morphosyntactic subject properties which are associated with the role of subjects as topic expressions in P[redicate] F[ocus] sentences ... One natural way of achieving non-topic construal (though not the only logically possible one) is to endow the subject constituent with grammatical properties which are conventionally associated with FOCUS arguments. Since in a P[redicate] F[ocus] construction the unmarked focus argument is the OBJECT, topic construal can be cancelled by coding the subject with grammatical features normally found on the object of a P[redicate] F[ocus] sentence."

(Lambrecht, 2000, 624-625)

# 5.3 The impersonal construction of Tswana intransitive verbs

The transitive construction of Tswana has a rigid AVPX constituent order. A and P are equally unmarked, but transitive verbs obligatorily agree with A, whereas the use of

pronominal affixes representing P is conditioned by topicality. Tswana intransitive verbs have an accusatively aligned construction in which S precedes the verb and governs verb agreement in the same way as A. In this construction, S is obligatorily interpreted as topical, but intransitive verbs also have an impersonal construction very similar to that of French, whose function is to de-topicalize S. In the impersonal construction, the intransitive verb does not show any overt mark of a valency change, the NP representing the S argument occurs immediately after the verb, i.e. in the canonical position of objects, and is not cross-referenced on the verb, which invariably shows a dummy subject marker of class 15/17—ex. (15).

#### (15) *Tswana* (author's field notes)

- a. Ba-simane ba-tlaa-bin-a2-boy A3:2-FUT-dance-FIN'The boys will dance.'
- b. *Go-tlaa-bin-a* ba-simane
  A3:15/17-FUT-dance-FIN 2-boy
  'There will be a dance performed by (the) boys.' (lit. 'There will dance boys')

This construction is much more frequent in Tswana than in French, due to constraints on the topicality of NPs in subject role particularly strict in Tswana. For example, in Tswana, negative or interrogative pronouns cannot occur in  $A/S_A$  role. With transitive verbs, passivization is the strategy commonly used to avoid A NPs that would not meet the topicality requirements imposed by the system of Tswana, and with intransitive verbs, the impersonal construction provides a possible strategy to encode S arguments that do not meet the conditions to occur in a construction in which S is aligned with A.

#### (16) *Tswana* (author's field notes)

- a. Go-tlaa-bin-a bo-mang?
  A3:15/17-FUT-dance-FIN 2-who
  'Which persons will dance?' (lit. 'There will dance which persons?')
- b. \* Bo-mang ba-tlaa-bin-a?

It is interesting to note in this connection that in Tswana, 'Thank you' is usually expressed as *Ke-a-lebog-a*, lit. 'I am THANKING', a polite reply being *Go-lebog-a nna* (lit. 'There thanks ME'), with the same verb in the impersonal construction, and the first person singular pronoun *nna* in postverbal position. Similarly, Tswana speakers use the impersonal construction to identify themselves at the beginning of a phone call. For example, a man named Kitso usually begins a phone call by the sentence *Go-bu-a Kitso*, lit. 'There speaks KITSO'. In this context, the accusatively aligned construction *Kitso o-a-bu-a* 'Kitso is SPEAKING' would be inappropriate.<sup>13</sup>

<sup>&</sup>lt;sup>13</sup>For a similar analysis of an analogous construction in another Southern Bantu language, see (Du Plessis and Visser, 1992, 130-133). On the basis of misinterpreted second-hand data, (Van Valin Jr., 1999, 516) analyzes the same construction in Southern Sotho as a construction similar to those found in Spanish and Italian, where focalized S NPs occur in postverbal position without losing all of their A-like properties (see section 5.4). In fact, the impersonal construction of Sotho intransitive verbs has exactly the same characteristics as those of French or Tswana.

#### 5.4 Russian genitive of negation

According to Pesetsky (1982), in Russian, as illustrated by ex. (17), objects of transitive verbs, but not subjects, can appear in the genitive case when the clause contains negation, and this property is shared by the subjects of a subclass of intransitive verbs.

- (17) *Russian* (Pesetsky, 1982)
  - a. *Mal'čiki ne polučili nikakix pisem* boy.PL NEG receive.PST.PL any.PL.GEN letter.PL.GEN 'The boys didn't receive any letters.'
  - b. \* Nikakix mal'čikov ne polučilo pis'ma any.PL.GEN boy.PL.GEN NEG receive.PST.SGN letter.PL intended: 'No boys received letters.'
  - c. Ne prišlo ni odnogo mal'čika NEG come.PST.SGN not\_even one.SG.GEN boy.SG.GEN 'Not a single boy came.'
  - d. \* Ne tancevalo ni odnogo mal'čika NEG dance.PST.SGN not\_even one.SG.GEN boy.SG.GEN intended: 'Not a single boy danced.'

However, Babby 2001 observes that 'unergative' intransitives are not disallowed from occurring in this construction, provided a locative preposition phrase precedes the verb, as in ex. (18).

- (18) *Russian* (Babby, 2001)
  - a. *Meždu brevnami ne skryvalos' tarakanov* between beam.PL.INSTR NEG hide.PST.SGN cockroach.PL.GEN 'There were no cockroaches hiding among the beams.'
  - b. Tam bol'še ne igraet nikakix detej there more NEG play.PRS.A3SG any.PL.GEN child.PL.GEN 'There are no longer any children playing there.'

Therefore, the genitive of negation of Russian does not involve split intransitivity, and must be viewed as another case of pragmatically driven fluid intransitivity.

# 6 Partial fluid intransitivity

#### 6.1 Subject inversion and 'unaccusative inversion' in French

In addition to the impersonal construction analyzed above, French has several constructions in which an NP representing the S argument of an intransitive verb occurs in postverbal position. These constructions are not clearly distinguished by traditional grammar, but have been analyzed in detail by Bonami, Godard and Marandin (see Marandin, 2001; Bonami et al., 1999; Bonami and Marandin, 2001). In two of them (inversion in extraction contexts and heavy subject NP inversion), A arguments of transitive verbs may occur in postverbal position too, and are equally concerned by the loss

of some properties typical for canonical S/A NPs. The constructions in question cannot be analyzed in terms of alignment variation, and do not necessitate a revision of the characterization of inverted NPs as subjects. But in the construction termed 'unaccusative inversion' in Marandin's terminology, illustrated by ex. (19), the possibility to occur in postverbal construction is limited to the S argument of intransitive verbs.

- (19) French (Marandin, 2001)
  - a. Je voudrais que vienne Marie A1SG want.COND.1SG that come.SBJV.3SG Marie 'I would like for Marie to come.'
  - b. [Le silence se fit.]

Alors sont entrés deux hommes then AUX.PRS.3SG enter.PTCP.PLM two man.PL '[Silence fell.] Then entered two men.'

c. Pierre ne savait pas que suivaient d'autres
Pierre NEG know.IMPF.3SG NEG that follow.IMPF.3PL INDEF-other.PL
personnes
person.PL
'Pierre did not know that other persons were following.'

In this construction, unlike inverted subjects in extraction contexts, indefinite post-verbal S NPs trigger *en*-pronominalization in the same way as P NPs in the transitive construction. But in other respects they are aligned with A: as shown in detail by (Marandin, 2001), unlike postverbal S NPs in the impersonal construction, S NPs in the 'unaccusative inversion' can control adjuncts like canonical S/A NPs, and agree with the verb in number. Therefore, they do not lend themselves to a straightforward characterization as syntactic subjects (as in inversion in extraction contexts) or objects (as in the impersonal construction), and are best analyzed as a special type of complement (Bonami and Marandin, 2001, 123). In other words, this construction is an instance of *partial* fluid intransitivity.

# 6.2 Partial fluid intransitivity in other languages

Presentational constructions of intransitive verbs functionally similar to the impersonal construction of French intransitive verbs have been described in many other European languages, but formally, these constructions are rather comparable to French 'unaccusative inversion', in the sense that the S argument occuring in postverbal position is aligned with P with respect to some other properties, but remains aligned with A as regards the control of verb agreement. Languages in which such constructions are found can still be characterized as having pragmatically driven fluid-S systems, but their fluidity involves an alternation between accusative and *mixed* alignment (and not between accusative and *ergative* alignment, as in the case of the impersonal construction of French intransitive verbs).

In languages in which the basic constituent order of the transitive construction is AVP, it has often been observed that intransitive S NPs in postverbal position may show alignment with P with respect to some other properties, without however losing the

control of verb agreement. A crucial characteristic of the constructions in question is that the possibility to show ergative alignment in some behavioral properties is limited to postverbal S arguments, i.e. to S arguments overtly aligned with P with respect to constituent order, and disappears when the S argument of the same intransitive verbs occupies the canonical A/S position to the left of the verb.

In the literature on unaccusativity, partial alignment with P limited to postverbal S NPs in languages having SV~VS alternations has been characterized as *surface unaccusativity*, in order to distinguish it from *deep unaccusativity* manifested irrespective of the position of the argument (Levin and Rappaport Hovav, 1995, 17–21). The tendency in recent works is clearly to question the status of such alignment variations as unaccusativity diagnostics, and to emphasize the relation with presentational focus (see a.o. Lambrecht, 2000; Alexiadou, 2007).

Here again, using the notions of alignment typology, the crucial point is that 'surface unaccusativity' is an instance of *fluid* intransitivity rather than *split* intransitivity, since it involves the possibility for (at least a subclass of) intransitive verbs to have two constructions differing in the alignment properties of S. The difference with the constructions of French or Tswana examined in section 5 is that, in the cases considered in this section, the alignment variation affects some characteristics of S only, and in particular does not affect its status as the controller of verb agreement.

This applies in particular to Italian *ne*-cliticization. According to (Burzio, 1986), in Italian, *ne* can represent the head of an NP in P role, or of an NP encoding the S argument of a subclass of intransitive verbs, but cannot represent, either the head of an NP in A role, or of an NP encoding the S argument of another subclass of intransitive verbs. Crucially, *ne* can represent the head of postverbal S NPs only—ex. (20).

#### (20) *Italian* (Burzio, 1986)

- a. *Molti* esperti arriveranno many.PLM expert.PL arrive.FUT.3PL 'Many experts will arrive.'
- b. Arriveranno molti esperti arrive.FUT.3PL many.PLM expert.PL 'Many experts will arrive.'
- c. Ne arriveranno molti of\_them arrive.FUT.3PL many.PLM 'Many of them will arrive.'
- d. \* *Molti* ne arriveranno many.PLM of\_them arrive.FUT.3PL

Several studies have shown that the division of Italian intransitive verbs into two classes according to this criterion is questionable (Lonzi, 1986), and have pointed to a relation with sentence focus (Bentley, 2004).

Another unaccusativity diagnostic proposed for a number of languages (see a.o. (Torrego, 1989) for Spanish, (Alexiadou, 1996) for Greek) is that, in languages in which bare nouns can occur in P role but not in A role, bare nouns in S role are possible with a subclass of intransitive verbs only—ex. (21). But here again, this possibility is limited to postverbal S NPs, and the division of intransitive verbs into two classes according to this criterion is not so clear-cut as it may seem at first sight. 'Unergative' predicates

may become acceptable when a locative adverbial phrase is added, which suggests a parallel with locative inversion and points to a pragmatic conditioning in terms of presentational focus (Ortega-Santos, 2005; Alexiadou, 2007).

- (21) Spanish (Ortega-Santos, 2005)
  - a. *Llegaron libros* arrive.PFV.3PL book.PL 'Some books arrived.'
  - b. ?? Corren chicos run.PRS.3PL boy.PL 'Boys run.'
  - c. Aquí corren chicos here run.PRS.3PL boy.PL 'Boys run here.'

English Locative Inversion and there-insertion are other cases in point—see a.o. (Levin and Rappaport Hovav, 1995, 215–277). The same analysis also applies to the contrast found in the Mayan language Ch'orti' between fixed alignment with respect to indexation and fluid alignment in constituent order (Quizar, 1994).

The SV~VS alternation of Mandarin Chinese (Li and Thompson, 1981, 501–519) basically illustrates the same phenomenon, with however the particularity that Chinese simply cannot have mismatches between constituent order and other coding characteristics of core syntactic terms, due to the total absence of case marking and argument indexation.

#### 7 Conclusion

In this paper, I have tried to show that,

- (a) not all variable properties of intransitive constructions can be described in terms of alignment variations, and in particular, several phenomena currently mentioned as 'unaccusativity diagnostics' are not so straightforwardly related to split intransitivity as could be expected from the definition of unaccusativity as it is currently formulated;
- (b) overt split intransitivity is a more widespread phenomenon than assumed by most typologists, and should in particular be recognized in a number of predominantly accusative languages in which current practice tends to occult the existence of a minor class of intransitive verbs whose coding properties show ergative alignment;
- (c) although current hypotheses about the semantic correlates of split intransitivity seem to be basically correct, the possibility of semantically arbitrary intransitivity splits should not be totally discarded;
- (d) the distinction between split intransitivity proper and fluid intransitivity is crucial in the evaluation of the precise status of variations in the alignment properties of intransitive verbs;

- (e) a thorough analysis of the impersonal constructions of French and Tswana intransitive verbs confirms the existence of a type of alignment variation not recognized in classical works on alignment typology, namely pragmatically driven fluid intransitivity;
- (f) as illustrated by French, several constructions involving pragmatically driven fluid intransitivity but differing in the extent to which S shows A-like vs. P-like properties may coexist in the same language.

#### **Abbreviations**

In the Tswana examples, numbers at the be- HAB: habitual ginning of nominal forms, or after '3:', indicate noun classes (3:1 = 3rd person class 1, etc.). Otherwise, numbers indicate persons.

1D/2Q: (Akhvakh) 1st person in declarative clauses, 2nd person in questions

A: pronominal clitic or affix referring to the

agent of prototypical action verbs

ABS: absolutive

ACC: accusative AFF: affirmative

AFOC: A-focus AUX: auxiliary COND: conditional

D: pronominal clitic or affix referring to a par-

ticipant represented by a dative NP DEF: definite

DEM: demonstrative DISC: discourse particle

ERG: ergative

F: feminine FIN: (Tswana) inflectional ending of verbs that

does not carry a meaning by itself, but contributes to the identification of tense

FUT: future GEN: genitive

**IMPERS:** impersonal **IMPF**: imperfective **INDEF:** indefinite **INF:** infinitive **INSTR:** instrumental

**INTROV**: introversive

M: masculine N: neuter **NEG:** negation

OBL: (Kurmanji) oblique case

P: pronominal clitic or affix referring to the pa-

tient of prototypical action verbs

PASS: passive PFV: perfective PL: plural PRS: present PST: past PTCP: participle **RESTR:** restrictive

S: pronominal clitic or affix referring to the

single argument of monovalent verbs

SBJV: subjunctive SG: singular SFOC: S-focus STOP: S-topic

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