

## Sociative causative markers in South-American languages: a possible areal feature

Antoine Guillaume, F. Rose

#### ▶ To cite this version:

Antoine Guillaume, F. Rose. Sociative causative markers in South-American languages: a possible areal feature. Essais de typologie et de linguistique générale, Mélanges offerts à Denis Creissels, ENS Editions, pp.383-402, 2010. halshs-00724601

### HAL Id: halshs-00724601 https://shs.hal.science/halshs-00724601

Submitted on 4 Sep 2012

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers. L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

# Essais de typologie et de linguistique générale Mélanges offerts à Denis Creissels

Sous la direction de Franck Floricic

Avec les contributions de :

Anne Abeillé, Gilles Authier, Isabelle Bril, Viacheslav Chirikba, Gerrit J. Dimmendaal, Anaïd Donabédian-Demopoulos, Franck Floricic, Zygmunt Frajzyngier, Antoine Guillaume, John Haiman, Alice C. Harris, Martin Haspelmath, George Hewitt, Larry M. Hyman, Renée Lambert-Brétière, Yury A. Lander, Gilles Lazard, Christian Lehmann, Alain Lemaréchal, Michel Maillard, Elena Maslova, Lucia Molinu-Floricic, Claire Moyse-Faurie, Robert Nicolaï, Derek Nurse, Gérard Philippson, Bernard Pottier, Konstantin Pozdniakov, Georges Rebuschi, Françoise Rose, Thilo C. Schadeberg, Anna Siewierska, Mark Van de Velde, Johan Van der Auwera, Sylvie Voisin, Valentin Vydrine

> ENS ÉDITIONS 2010

#### Éléments de catalogage avant publication

Essais de typologie et de linguistique générale. Mélanges offerts à Denis Creissels / Anne Abeillé, Gilles Authier, Isabelle Bril [et al.]; Sous la direction de Franck Floricic – Lyon : ENS Éditions, 2010. – 1 vol. (616 p.; 23 cm). (Langages, ISSN 1285-6096). Notes bibliogr. Index ISBN 978-2-84788-197-4

Tous droits de représentation, de traduction et d'adaptation réservés pour tous pays. Toute représentation ou reproduction intégrale ou partielle faite par quelque procédé que ce soit, sans le consentement de l'éditeur, est illicite et constitue une contrefaçon. Les copies ou reproductions destinées à une utilisation collective sont interdites.

© ENS ÉDITIONS 2010 École normale supérieure de Lyon 15 parvis René Descartes BP 7000 69342 Lyon cedex 07

ISBN 978-2-84788-197-4

## Sociative causative markers in South American languages: a possible areal feature

Antoine Guillaume and Françoise Rose<sup>1</sup>

Sociative causation is a particular type of causation, where the causer not only makes the causee do an action, but also participates in it. In the typological literature, sociative causation is typically presented as a possible reading of a regular causative construction and rarely as a specific type.

In the present paper, based on a preliminary survey of this category in the languages of the world, we first show that specific sociative causative markers are very frequent in South American languages. This leads us to put forward the hypothesis that a specific marker for sociative causation could be an areal feature of this part of the world.

A second major finding of our study is that, in addition to being expressed by specific sociative or regular causative markers, the semantics of sociative causation is frequently manifested by applicative morphemes. This suggests an alternative historical origin for the development of the well-known phenomenon of causative/applicative syncretism: while the evolution from causative to applicative is usually postulated in the literature, our data seem to indicate that the evolution path could just as well be from applicative to causative.

The paper is organized as follows. In Section 1, we provide a short review of the available typological literature on sociative causation. The following

The abbreviations used in the examples are listed on page 395.

1 We are proud to offer this paper to Denis Creissels as a modest present for his 65<sup>th</sup> birthday. Denis was one of our first professors of linguistics at the University Lumière Lyon 2 when we started learning the discipline in the mid-90s. As we proceeded in our respective studies of the previously unknown Cavineña and Emerillon languages, with a concern of producing typologically-informed descriptions of these languages, Denis has always been a major source of inspiration and guidance. The research reported in this paper was first presented at the annual conference of the Society for the Study of the Indigenous Languages of the Americas (SSILA) in Anaheim on January 6<sup>th</sup>, 2007. In addition to the people who attended this presentation and commented on it, we are grateful to Sasha Aikhenvald, Colette Grinevald and Sylvie Voisin for their suggestions on an earlier version of this paper. Finally, we want to thank Vincent Monatte for designing the map in Section 2.

sections present the main results of our study: Section 2 discusses the geographic distribution of specific sociative causative markers, with a particularly high density in South America; Section 3 confirms the well known pattern of extension from regular causative markers to sociative causation, in South America as elsewhere; Section 4 brings to light the generally underestimated pattern of extension from regular applicative markers to sociative causation, noticeable in several South American languages.

#### 1. Sociative causation

Sociative causation differs from regular causation in that the causer not only makes the causee do an action, but also participates in it, which is usually paraphrased with sentences like *make someone do something by doing it with them* or *help someone do something*. The distinction with regular causation is illustrated in the Japanese examples below. In (1a), the causative marker *-se* has a regular causative meaning – the causer does not participate in the action of "running". In (1b), however, this marker has a sociative causative meaning – the causer not only makes the causee do the action of "playing", but also does some "playing" as well.

(1)	a.	Japanese (Shibatani & Pardeshi 2002, p. 87, p. 100) non-sociative causation				
		Taroo-ga	Ziroo-ni/o	hasira <b>-se</b> -ta		
		Taro-NOM	Ziro-dat/acc	run-caus-past		
		'Taro had / n	nade Ziro run (Ta	aro is not running)'		
	b.	sociative cau	tive causation			
		Hahaoya-ga	kodomo-o	asoba <b>-se</b> -te	i-ru	
		mother-NOM	child-acc	play-caus-conj	be-pres	
'Mother is making the child play (playing with						

Sociative causation is mentioned by Dixon (2000) and Kulikov (2001) in their respective typological studies on causation. It has then been explored by Shibatani & Pardeshi (2002) in a major study devoted to that semantic category. In their study, different semantic nuances of sociative causation are specified, depending on the extent to which the action of the causer is identical to that of the causee. These nuances are exemplified below with more Japanese examples. In joint-action situations, both causer and causee perform the same action, as in (2a) (repeated from (1b)). In assistive situations, the causer helps the causee without performing exactly the same action, as in (2b).<sup>2</sup> Finally, in supervision situations, the causer merely supervises the action performed by the causee (2c).

2 Kulikov (2001, p. 892) points to the fact that assistive situations do not necessarily participate to the semantics of causation. They are however often treated as such, for being marked with a causative marker.

(2)	a.	Japanese (Shibatani & Pardeshi 2002, p. 100) sociative causation: joint-action					
	a	Hahaoya-ga mother-NOM	kodomo-o child-acc	asoba- <b>se</b> -te play-caus-conj play (playing w	<i>i-ru</i> be-pres vith her)'		
	b.	Hahaoya-ga mother-NOM	ation: assistive <i>kodomo-ni</i> <sup>child-dat</sup> king the child	<b>osikko-o</b> p <b>ee</b> -лсс	sa <b>-se-</b> te do-caus-conj	<i>i-ru</i> be-pres	
	с.	Hahaoya-ga mother-NOM	ation: supervis <i>kodomo-ni</i> child-dat king the child	<b>hon-o</b> book-acc	yoma- <b>se</b> -te read-саиs-солј	<i>i-ru</i> be-pres	

Sociative causation is usually seen as a possible meaning extension of regular causative markers, as discussed by Kulikov (2001) and Shibatani & Pardeshi (2002). This phenomenon is fairly frequent cross-linguistically. In addition to Japanese, such extensions are attested in languages such as Georgian (Comrie 1985, p. 334, Kulikov 2001, p. 892), Chinese (Shibatani & Pardeshi 2002, p. 102) and Marathi (Shibatani & Pardeshi 2002, p. 97-98):

(3)	Georgian (Comrie 1985, p. 334)						
	Mama	shvil-s	ceril-s	a-cer- <b>ineb</b> -s			
	father	SON-DAT	letter-acc	pref-write-caus-3sg			
	'Father makes/helps/lets his son write the letter'						

As shown by Shibatani & Pardeshi, the existence of such semantic extensions have considerable theoretical interest. First, they provide for a semantic link between the better known subtypes of causatives which are direct and indirect, as shown in the following diagram.

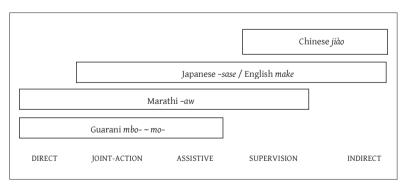


Figure 1 Distribution of different causative forms over the sociative domain (Shibatani & Pardeshi 2002, p. 102)

Second, extensions from causative to sociative causation provide convincing explanations for the widespread phenomenon of causative/applicative syncretism. This term refers to the fact that, in some languages, a single marker can have either a causative or an applicative function, depending on the verb it attaches to (see, for example, Peterson 2007, p. 64-66).<sup>3</sup> For example, this phenomenon is very frequent in Australian languages. As described by Austin (1997), intransitive verbs in these languages often split into two transitivization classes (causative and applied).<sup>4</sup> This case of wide causative/applicative syncretism is illustrated below with examples from Pitta-Pitta:

(4)	a.	Pitta-Pitta (Blake 1979, cited in Austin 1997) causative <i>-la-</i>				
		kathi- kurra- tharka- yanthi-	'to climb up' 'to fall' 'to stand' 'to burn'	kathi-la- kurra-la- tharka-la- yanthi-la-	'to put up' 'to drop' 'to stand it up' 'to burn it up'	
	b.	applied -la- mirnti- tiwa- wiya-	'to play' 'to be jealous' 'to laugh'	mirnti-la- tiwa-la- wiya-la-	'to play with' 'to be jealous of' 'to laugh at'	

Shibatani and Pardeshi analyze such cases of causative/applicative syncretism as a causative marker typically taking an applicative function on active verbs. Sociative causation seems to explain this functional extension. It is because regular causative markers can develop sociative causation meanings that they can also develop regular applicative meanings, by way of entailments, as follows:

sociative causative	>	comitative applicative
'I make him walk by walking with him'	>	'I walk with him'
'I make her play by playing with her'	>	'I play with her'

Sociative causation can be manifested by specific markers in some languages, although such markers are rarely discussed in the general typological literature. As far as we know, specific sociative causative markers were first identified in the Tupi-Guarani branch of the Tupi family, under the name of comitative causation (Adam 1896, Rodrigues 1953). In Tupinambá, for example, there is a clear contrast between a regular causative prefix *bo-~ mo-* and a specific sociative causative causative prefix *ero-~ eno-*:

3 Recall that both causative and applicative are (at least in their standard acceptance) valencyincreasing mechanisms. They differ in that a causative introduces a new A (causer) argument and demotes the original A argument (causee), while an applicative promotes an oblique participant (benefactive, instrumental, comitative, etc.) into O function, leaving the A unaffected.

4 A quite similar situation is found in Oceanic languages (Lichtenberk 1993).

- (5) Tupinambá (Rodrigues 1953, p. 136)<sup>5</sup>
   a. non-sociative causation
   *mo-oryb* <sub>cAus-be.happy</sub>
   'make someone be happy'
   b. sociative causation
  - *ero*-oryb <sup>cnus.soc-be.happy</sup> 'make someone be happy with oneself'
  - c. sociative causation Xe-r-ykeyr-a xe-r-eno-sém 1sg.II-RELN-older.brother-ARG 1sg.II-RELN-CAUS.soc-go.out 'My older brother took me out'

Sociative causation has been posited as a special type of causative by Dixon (2000, p. 73), who calls it *causative of involvement* and illustrates it with two South American languages (Nomatsiguenga, an Arawak language, and Kamaiurá, a Tupi language), and Alamblak, a Papuan language. All those languages display, among other causative morphemes, a special causative morpheme used when the causer is also involved in the activity (in addition to the causee).

We will show below that such specific sociative markers are not so rare, at least in South America.

To sum up, the literature on sociative causation posits the three following points:

- specific markers for sociative causation are rare;
- sociative causation is often the result of a semantic extension of a regular causative marker;
- cases of causative/applicative syncretism could be explained via the intermediate category of sociative causation.

Our cross-linguistic survey of sociative causation<sup>6</sup> provided additional information that enables us to discuss each of these three points in the following sections. This survey was conducted on the basis of questionnaires sent to typologists or descriptivists (directly or via mailing lists, such as LingTyp, Etnolinguistica, TypoLing) and the consulting of typological studies on causatives, grammars and works on language families or areas.<sup>7</sup> The sample of languages has therefore not been planned nor calculated, and obviously the authors being both Amerindianists, a certain bias is possible, but is probably not enough to explain the strikingly uneven distribution of specific causative markers around the world.

7 We would like to sincerely thank all the colleagues who kindly shared their analyses with us.

<sup>5</sup> The glosses are ours.

<sup>6</sup> Our goal was to determine what kind of morphological devices the languages use to express sociative causation. Cases of periphrasis and complex predication were therefore not taken into account.

# 2. Specific sociative causative markers: a characteristic of South America

Our study first shows that specific markers for sociative causation are widespread in South America. Several languages show a clear contrast between regular causative morphemes and a specific sociative causative morpheme, as illustrated with Emerillon, a Tupi language spoken in French Guyana, and Cavineña, a Tacanan language spoken in north Bolivia.

In Emerillon, the use of the regular causative marker  $bo- \sim m\tilde{o}$ - implies that the causer does not participate in the caused event, as in (6b), where the woman does not do any "sleeping", while the use of sociative causative *ero-* ~ *ro*- implies that the causer does participate in it, as in (6c), where the husband, in addition to making his wife sleep, does sleep as well.

(6)	a.	Emerillon (F regular intr	Rose 2003, p. ansitive	364-372, fie	eldnotes 20	06)
		Mozepẽ	?ar-ãhã	o-ker	kot <del>i</del>	
		one	day-only	3.I-sleep	there	
		'They slept o	only one day	over there	2	
	b.	regular caus	sative			
		Wãĩwĩ	o- <b>mõ</b> -ker	?im	ã?ẽ	
		woman	3.I-caus-sleep	chile	ł	
		'The womar	n is putting t	he child to	sleep'	
	с.	sociative ca	usative (join	t action)		
		0-er-aho	0- <b>er</b> (	o- <b>ero</b> -ker		
		3.I-caus.soc-go '(The husba her sleep wi	nd) carries (	carries (his new wife, who had gotten drunk) and r		

In Cavineña, the regular causative vs. sociative causative contrast is manifested by the pair of markers *-sha* ~ *-mere* and *-kere*. The pair *-sha* ~ *-mere* marks regular causation<sup>8</sup>, as in (7b), where the woman (the causer) is not involved in the event of "eating" while *-kere* marks sociative causation, as in (7c), where the causer (the 1<sup>st</sup> person singular), in addition to making the causee (Mr Francisco) eat, also eats as well.

(7)	a.	Cavineña (Guillaume 2008, p. 297-301) regular transitive				
		Ebakwa=tu	ara-wa	misi		
		child=3sg	eat-perf	tamale		
		'The child ate tamale'				

8 Regular causative markers are sensitive to the transitivity of the verb stem: *-sha* is used with intransitive stems while *-mere* is used with transitive stems. The sociative causative marker *-kere*, on the other hand, can be used with either intransitive or transitive verb stems.

b.	regular causat	ive			
	Epuna=ra=tu	ara- <b>mere</b> -wa	misi	tu-ja	ebakwa
	woman=erg=3sg	eat-caus-perf	tamale	3sg-gen	child
	'The woman fe	ed the child with tamale'			
с.	sociative causa	ative (joint action)			
	E-ra=tu	ara- <b>kere</b> -chine	torta	Don Fra	ncisco
	1sg-erg=3sg	eat-caus.soc-rec.past	cake	Mr. Franc	cisco
	'I had / invited	l Mr. Francisco (to) eat a	cake with	me'	
d.	sociative causa	ative (assistive)			
	Maestro=ra=Ø	a- <b>kere</b> -kware			
	master=erg=1sg	make-caus.soc-rem.past			
	'The master wo	ould make it (a canoe) w	ith me (and	l teach me	how to do it at
	the same time)	)'			

Emerillon and Cavineña differ in that the sociative causative *ero*- of Emerillon is restricted to intransitive predicates and can only have joint-action meanings, while the sociative causative *-kere* of Cavineña can also appear on transitive verbs, as in (7c, d), and can convey the assistive nuance, as in (7d).

Consequently, these markers map differently in the semantic continuum defined by Shibatani and Pardeshi, as illustrated in Figure 2. In the case of Emerillon, the three categories of direct, indirect and sociative causation are represented by distinct markers. The situation with Cavineña is less clear since both regular causative markers *-sha* and *-mere* can have both direct and indirect meanings.

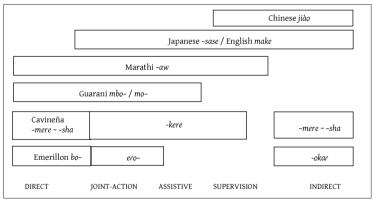


Figure 2

Revised distribution of different causative forms over the sociative domain (adapted from Shibatani & Pardeshi 2002, p. 102)

In our study, we found specific sociative markers in 15 South American languages belonging to seven different families. They are listed in Table 1 (an illustrative example from each language is provided in the Appendix).<sup>9</sup>

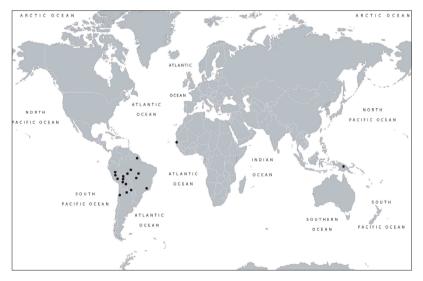
9 Note that in the sources, the markers are not necessarily labelled as sociative causative

Family	Language	Marker	Reference
Araucanian	Ancient Araucanian	-kilo	Valdivia (1606) Adelaar (p.c.)
Arawak	Nomatsiguenga	-hag ~ -ak	Wise (1971, 1986, 2002)
Mosetenan	Mosetén	jaj-	Sakel (2003, 2004)
Panoan	Shipibo-Konibo	-k(i)in	Valenzuela (2002, 2003)
Quechuan	Cuzco-Collao Quechua	-ysi	Cusihuamán (1976), Adelaar (p.c.)
Tacanan	Cavineña	-kere	Guillaume (2004)
	Reyesano	-tsawa	Guillaume (2006, fieldnotes)
Tupi	Emerillon	ero-	Rose (2003)
	Kamaiurá	ero-	Seki (2000)
	Karo	ta-	Gabas (1999)
	Mundurukú	duju- ~ do-	Gomes (2006)
	Tapiete	ri-	González (2005)
	Tapirapé	era- ~ <sup>10</sup>	Praça (p.c.)
	Tupinambá	ero- ~ eno-	Rodrigues (1953)
	Yuki	ero- ~ ro-	Villafañe (2004)

Table 1

South American languages with attested specific sociative causative markers

By contrast, we found very few examples of specific sociative causative markers in other parts of the world, even in Meso- and North America. As a matter of fact, we only found these types of markers in Wolof (Atlantic family, Senegal) and Alamblak (East Sepik, Papua). This particular distribution of specific



Geographic distribution of specific sociative causative markers

markers. However, the way they are described and illustrated (and occasionally the discussion we had with the authors themselves) led us to analyze them as such.

10 '...' stands for the following allomorphs: *ra*, *r*, *ere*, *re*, *wera*, *wer*.

sociative causative markers, i.e. their high concentration in South America – see the map on the preceding page – suggests that they could be seen as an areal feature of South America.

Our hypothesis of an areal feature is strengthened by the fact that within South America, as shown by the map, the languages with specific sociative causative markers tend to cluster in a region which could be defined as South-Western Amazonia. If we note that, on the one hand, more than half of these languages belong to the Tupi family, and on the other hand, this family of languages is said to have originated in that particular area (in the actual Brasilian state of Rondonia to be more precise (Rodrigues 1999, p. 108)), we could imagine that specific sociative causative markers would have developed in Tupi languages first, and would have later been diffused to their neighbors. The fact that these markers are nowadays found in a number of languages that are located far away from Rondonia (whether they belong to the Tupi family or not) would be simply explained by the fact that Tupi languages nowadays have a very wide distribution in the continent.<sup>11</sup>

# 3. Extensions from regular causative markers to sociative causation

A second result of our study is that regular causatives with a sociative causation extension are frequent throughout the world, as anticipated. As far as South America is concerned, we found examples of such semantic extensions in the languages listed in Table 2. We actually suspect that this kind of semantic extension could probably be found in other languages where the available descriptions mention only the most prototypical causative meanings.

Family	Language	Marker	Reference
Arawak	Trinitario	im-	Gill (1957), Wise (1990)
	Asheninka	-akag	Payne (2002)
	Caquinte	-aka	Swift (1988, in Peterson 2007)
Panoan	Matsés	-me	Fleck (2003)
Carib	Kali'na Macushi	-nopï -nîpî, -pa	Lescure (p.c.), Hoff (1986) Abbott (1991)
Tupi	Guarani	то-	Velázquez-Castillo (2002)

Table 2

South American languages with attested regular causative markers having sociative causative semantic extensions

11 We thank Sasha Aikhenvald, Ian Maddieson and Marianne Mithun for observations regarding the inner distribution of specific sociative causative markers within South America. An example from Trinitario is given below: the *im*- prefix can either convey a regular causative meaning, as in (8b), or a sociative causative meaning, as in (8c):

- (8) Trinitario (Rose, fieldnotes 2006)

   a. regular intransitive
   No 'jiro-no t-yon-ono
   ART.PL man-PL 3-go-PL
   'The men went away'
   b. regular causative
  - Ma tata t-**im**-yon-nu-po ART.MASC.SG father 3-CAUS-gO-1SG-PAST 'My father sent me (there)'
  - c. sociative causative: joint action
     V-*im*-yon-yore
     1PL-CAUS-gO-FUT
     'We will take her with us (on our trip to another village)'

# 4. Extensions from applicative markers to sociative causation: an alternative origin for causative/applicative syncretism?

The third interesting result of our study is the unexpected number of cases where sociative causation is not expressed by causative markers (whether specific or not) but by applicative markers. This phenomenon is hardly ever discussed in the typological literature; in his recent typological study of applicative constructions, Peterson (2007, p. 65) says that the syncretism between causative and comitative / instrumental applicative is "seemingly [...] poorly attested, though [...] there is considerable residual evidence for it in a number of languages when we consider how these constructions are related diachronically".<sup>12</sup>

We will illustrate extensions from applicative markers to sociative causation with examples from Sikuani, a Guahibo language from Colombia (Queixalós 1998, 2000, 2002). In this language, the applicative marker *ka*- can have, on the one hand, a plain applicative function, with no hint of causation, promoting for instance an instrument into O function, as in (9a). On the other hand, it can convey both comitative and causative meaning, as in (9b), where both God and his wife go back home, and God causes his wife to do so.

12 A possible reason for the scarcity of studies on this type of extension is that, canonically, the semantic roles involved in applicative constructions are beneficiary or instrument, rather than comitative (we thank Sylvie Voisin for pointing this to us).

#### SOCIATIVE CAUSATIVE MARKERS

(9)	a.	Sikuani (Queixalós 2002, p. 320-321) instrument applicative				
		<i>Mahalu</i> <sub>Mahalu</sub>	<i>computadora</i> computer rote these stories v	Ø- <b>ka-</b> yakina-Ø <sup>30BJECT-APPL-Carve-3</sup> with the computer	-	baharpaliwaisianü <sup>ThoseStories</sup>
	b.	sociative c	ausative			
		Kuwainü	Ø- <b>ka</b> -nawiata-	Ø	pihawa	
		God	3-caus.soc-GoBack	K-3SUBJECT	HisWife	
		'God took his wife back home'				

In South America, we found this type of extension in the languages listed in Table 3.

Family/unclassified	Language	Marker	Reference
Arawá	Jarawara	ka-/wa-	Dixon (2004), Vogel (p. c.)
	Paumarí	va-/vi-	Chapman & Derbyshire (1991)
Arawak	Yine	himu-	Hanson (forthcoming)
Guahibo	Sikuani	-ka	Queixalós (1998, 2000, 2002)
unclassified	Movima	-te	Haude (2006)
unclassified	Yurakare	special person prefixes	van Gijn (2006)

 Table 3

 South American languages with attested applicative markers having sociative causative semantic extensions

As we mentioned earlier, the phenomenon of causative/applicative syncretism is sometimes explained by the fact that regular causative markers can develop sociative causation meanings (Shibatani & Pardeshi 2002). For the languages cited in Table 3, the analysis seem to indicate that the other direction of semantic extension would be more appropriate: from the sociative applicative form, a sociative causative meaning could be derived. Using the same examples again, it seems to us that the sociative causative meaning 'I make him walk by walking with him' could be derived from the sociative meaning 'I walk with him'.

sociative causative	<	comitative applicative
'I make him walk by walking with him'	<	'I walk with him'
'I make her play by playing with her'	<	'I play with her'

It is worth mentioning that in the languages we surveyed, the sociative causation extensions manifested by applicative markers are frequently found with verbs of action, and more specifically verbs of motion. An example from Jarawara, an Arawá language from Brazil, is given below. In such cases, it is easy to see how in an action performed by several actors, one of them could have more control, and be reanalyzed as a causer.

393

(10) Jarawara (Dixon 2004, p. 37, p. 255-256)
 comitative meaning ~ sociative causative meaning
 *Kojari* to-wa-ki-joma-ma-hare-ka
 paddle away-appl-in.motion-through.gap-back-past-declar
 '(The child) took the paddle back through the door'

These types of extensions could explain why, in many cases, it is difficult to tease apart a comitative applicative from a sociative causative. For instance, Wise (1990) gives a Machiguenga sentence that has two possible interpretations, a purely causative interpretation and a purely comitative interpretation.

(11) Machiguenga (Wise 1990, p. 95) No-panki-t-ag-ak-e-ri
1-plant-ep-cAus/comit-PERFV-NON.FUT-3sg.MASC
'I ordered him to plant / I planted with him'

Furthermore, it seems to us that some authors labeled this kind of constructions *applicative* on the basis that the language displays a large set of applicative markers, or possibly simply because the sociative causative is not yet recognized as a standard category in the typological literature.

The extension from comitative applicative to sociative causative can actually go as far as to express causation only, as in the Sikuani example in (12) (to be compared with (9a,b)).

(12)	2) Sikuani (Queixalós 2002, p. 321)						
	causative meaning						
	Itsamatakabi Phurunaminali pübü			Ø- <b>ka</b> -pitsapa-Ø			
	OneDay	God	Ant	30BJECT-CAUS-GOOUT-3SUBJECT			
	'One day, God made the ants go out'						

This leads us to propose a second possible source for causative / applicative syncretism: it does not necessarily have to be the result of a shift from causative to applicative via sociative causation, but can also be the result of a shift from an applicative function to a causative function, via sociative causation also. This hypothesis is corroborated by Payne (2002, p. 501-502) in a discussion of the Asheninka suffix *-akag* (see Table 2). He shows that this suffix originally comes from a reciprocal verbal suffix that later developed into a sociative applicative, and from there on to a causative. And indeed, Geniušiené & Nedjalkov's typology of the polysemy of reciprocal markers (2001) indicates that reciprocals often convey sociative meanings.

#### 5. Conclusion

The cross-linguistic study that we conducted on the category of sociative causation asserts the existence of a specific marker for sociative causation in a certain number of languages, the majority of which are found in South America. This particular distribution suggests that it could be an areal property of South American languages, even though other languages in the area display other means of expression for the sociative causation category. Among those means, we have pointed out the semantic extension of regular causative and the causative/applicative syncretism. Moreover, our data leave open the possibility that the phenomenon of causative/applicative syncretism be not necessarily the result of an extension from causative to applicative via sociative causation, but possibly the other way around, an extension of applicative to causative.

It remains important to reaffirm the fact that this study is still preliminary. As we pointed out, although we have looked at a fair number of languages, our study has nevertheless been biased towards South American languages. Therefore the investigation of the expression of the semantics of sociative causation in a wider range of languages is necessary in order to refine our initial results. Such a study would be aimed at answering at least the following questions: is it really the case that Wolof and Alamblak are the only non-South American languages to display specific sociative causative markers? What are the semantic nuances expressed by specific causative markers in languages which have them? Are the semantic nuances proposed by Shibatani & Pardeshi (2002) - joint-action, assistive and supervision - really at work in these languages? What other means - other than extensions from regular causative or applicative markers - do languages without specific sociative causative markers use in order to express this category (if they do)? Is it possible to establish correlations between the presence of a specific causative marker in a language and other grammatical categories, such as comitative adpositions, coordination constructions, plural marking? Can we predict whether a language with a specific causative marker be of the with- or and-type, according to Stassen (2000) typology?

#### Abbreviations

=	clitic boundary	ARG	argumental case
1,2,3	1 <sup>st</sup> , 2 <sup>nd</sup> , 3 <sup>rd</sup> person	ART	article
А	transitive subject/agent	BM	boundary marker
ABL	ablative	CAUS	causative
ABS	absolutive	CMPL	completive
ACC	accusative	CNT	contiguity marker
ALL	allative	COMIT	comitative
ANT	anteriority marker	CONJ	conjunction
APPL	applicative	CONTR	contrastive

DAT	dative	NOM	nominative
DC	discourse connector	N <b>3</b> P	third person plural (narrative)
DECLAR	declarative	0 <b>,</b> OBJ	transitive object/patient
DUR	durative	P <b>3</b> s, 3s	3 <sup>rd</sup> person singular (perfect),
EP	epenthetic		3 <sup>rd</sup> person singular
ERG	ergative	PERF	perfect
EV	evidential	PERFV	perfective
FEM	feminine	PL	plural
FUT	future	POSS	possessive
GEN	genitive	PREF	prefix
GER	gerund	PRES	present
Ι	set I personal prefix	QUEST	question
II	set II personal prefix	R.PST	remote past
IMP	imperative	REC.PAST	recent past
IND	indicative	RELN	relational
IPRF	imperfective	REM.PAST	remote past
М	masculine	REP	reportative
Ν	nuclear case	SG	singular
NCNT	non-contiguity marker	SOC	sociative
NFC	noun with classifier function	SUBJ	subject
NMZ	nominalizer		

#### References

ABBOTT M. 1991. Macushi. In D. Derbyshire & J. Pullum (eds.), 23-160.

- ADAM L. 1896. Matériaux pour servir à l'établissement d'une grammaire comparée des dialectes de la famille Tupi. Paris: Maisonneuve.
- AUSTIN P. 1997. Causative and applicative constructions in Australian aboriginal languages. In K. Matsumura & T. Hayashi (eds.), 165-225.
- BARENTSEN A. & Y. POUPYNIN (eds.). 2001. Functional grammar: Aspect and aspectuality. Tense and Temporality. Essays in honour of Alexander Bondarko. Munchen: Lincom Europa (Lincom Studies in Theoretical Linguistics 23)
- BLAKE A. 1979. Pitta-Pitta. In R. M. W. Dixon & B. Blake (eds), 183-243.
- BRUCE L. 1984. The Alamblak language of Papua New Guinea (East Sepik). Canberra: Australian National University (Pacific Linguistics series, Series C. No. 81).
- CHAPMAN S. & DERBYSHIRE, D. 1991. Paumarí. In D. Derbyshire & J. Pullum (eds.), 161-352.
- CHURCH E. 1981. Le système verbal du wolof. Dakar: Université Cheikh Anta Diop de Dakar (Documents linguistiques 27).
- COMRIE B. 1985. Causative verb formation and other verb-deriving morphology. In T. Shopen (ed.), 309-348.
- CREVELS M., S. MEIRA & H. VAN DER VOORT (eds.). 2002. Current studies on South American languages. Selected papers from the 50<sup>th</sup> international congress of Americanists in Warsaw and the Spinoza workshop on Amerindian languages in Leiden. Leiden: Research School of Asian, African and Amerindian Studies (CNWS).

- CUSIHUAMÁN G. A. 1976, *Gramática Quechua Cuzco-Collao*. Lima: Ministerio de Educación / Instituto de Estudios Peruanos.
- DERBYSHIRE D. C. & J. PULLUM (eds.). 1986. Handbook of Amazonian languages. Vol 1. Berlin / New York: Mouton de Gruyter.
- 1991. Handbook of Amazonian languages. Vol 3. Berlin / NY: Mouton de Gruyter.
- DIXON R. M. W. 2000. A typology of causatives: form, syntax and meaning. In R. M. W. Dixon & A. Aikhenvald (eds.), 30-83.
- 2004. The Jarawara language of Southern Amazonia. Oxford: Oxford University Press.
- DIXON R. M. W. & A. AIKHENVALD (eds.). 1999. *The Amazonian languages*. Cambridge: Cambridge University Press.
- DIXON R. M. W. & A. AIKHENVALD (eds.). 2000. Changing valency. Cambridge: Cambridge University Press.
- DIXON R. M. W. & B. BLAKE (eds.). 1979. Handbook of Australian languages, Vol 1. Canberra: ANU Press.
- ESTRADA FERNÁNDEZ Z. 2007. Causatives and applicatives in Pima Bajo: The interplay of the causative and the applicative in sociative causation. In Z. Estrada Fernández, A. Álvarez González, C. Chamoreau & S. Wichmann (eds.), 85-105.
- ESTRADA FERNÁNDEZ Z., A. ÁLVAREZ GONZÁLEZ, C. CHAMOREAU & S. WICHMANN (eds.). 2007. Studies in voice and transitivity. Munchen: LINCOM (LINCOM Studies in Theoretical Linguistics 39).
- FLECK D. 2003. A grammar of Matses. Rice University (Ph.D. Dissertation).
- GABAS N. 1999. A grammar of Karo, Tupí (Brazil). Santa Barbara: University of California (Ph.D. Dissertation).
- GENIUŠIENÉ E. & V. NEDJALKOV. 2001. Towards a typology of the polysemy of reciprocal markers. In A. Barentsen & Y. Poupynin (eds.), 51-65.
- GILL W. 1957. Trinitario Grammar. (ms).
- GOMES D. 2006. Estudo Morfológico e sintático da língua Mundurukú (Tupí). Brasilia University (Ph.D. Dissertation).
- GONZÁLEZ H. 2005. A grammar of Tapiete (Tupi-Guarani). University of Pittsburgh (Ph.D. Dissertation).
- GUILLAUME A. 2006. A Reyesano (Maropa) English dictionary, with grammatical notes. (ms., 169 p.).
- 2008. A grammar of Cavineña. Berlin / NY: Mouton de Gruyter (Mouton Grammar Library 44).
- HANSON R. forthcoming. A grammar of Yine (Piro). La Trobe University (Ph.D. Dissertation).
- HASPELMATH M., E. KÖNIG, W. OESTERREICHER & W. RAIBLE (eds.). 2001. Language Typology and Universals, Vol. 2. Berlin / NY: Walter de Gruyter.
- HAUDE K. 2006. A Grammar of Movima. Nijmegen: Radboud University (Ph.D. Dissertation).
- HOFF B. 1968. The Carib language. The Hague: Martinus Nijhoff.
- KULIKOV L. 2001. Causatives. In M. Haspelmath, E. König, W. Oesterreicher & W. Raible (eds.), 886-898.

- LEHMANN W. (ed.). 1978. Syntactic typology. Studies in the phenomenology of language. Austin: University of Texas Press.
- LICHTENBERK F. 1993. Causatives and applicatives in Oceanic. Communication at the *First International Conference on Oceanic Linguistics*, Vila, Vanuatu.
- MATSUMURA K. & T. HAYASHI (eds.). 1997. The dative and related phenomena. Tokyo: Hituzi Syobo.
- NOUGUIER-VOISIN S. 2002. Relations entre fonctions syntaxiques et fonctions sémantiques en wolof. Lyon : Université Lumière Lyon II (Ph.D. Dissertation).
- PAYNE D. 2002. Causatives in Asheninka. In M. Shibatani (ed), 485-505.
- PAYNE D. (ed.). 1990. Amazonian Linguistics. Studies in Lowland South American Languages. Austin: University of Texas Press.
- PETERSON D. 2007. Applicative Constructions. Oxford : Oxford University Press.
- QUEIXALÓS F. 1998. Nom, verbe et prédicat en Sikuani (Colombie). Paris: Peeters (SELAF) (Langues et sociétés d'Amérique Traditonnelle 6).
- 2000. Syntaxe sikuani (Colombie). Paris: Peeters (SELAF) (Langues et sociétés d'Amérique traditonnelle 7).
- 2002. The notion of transfer in Sikuani causatives. In M. Shibatani (ed), 319-339.
- Rodrigues A. 1953. Morfologia do verbo Tupi. Letras: Separata nº1, 121-152.
- 1999. Tupi. In R. M. W. Dixon & A. Aikhenvald (eds.), 107-124.
- ROSE F. 2003. Morphosyntaxe de l'émérillon. Une langue tupi-guarani de Guyane française. Lyon : Université Lumière Lyon II (Ph.D. Dissertation) (to appear in the Langues et Sociétés d'Amérique traditionnelle Series, Peeters).
- SAKEL J. 2003. A grammar of Mosetén. Nijmegen: Radboud University (Ph.D. dissertation).
- 2004. A grammar of Mosetén. Berlin & New York: Mouton de Gruyter (Mouton Grammar Library 33).
- SEKI L. 2000. Gramática do Kamaiurá. Campinas: Editora da Unicamp.
- STASSEN L. 2000. And-languages and with-languages. Linguistic Typology 4, 1-54.
- SHIBATANI M. (ed.). 2002. The grammar of causation and interpersonal manipulation. Amsterdam/Philadelphia: John Benjamins (Typological Studies in Language 48).
- SHIBATANI M. & P. PARDESHI 2002. The causative continuum. In M. Shibatani (ed.), 85-126.
- SHOPEN T. 1985. Language typology and syntactic description. Vol. III: Grammatical categories and the lexicon. Cambridge: Cambridge University Press.
- SwIFT K. 1988. Morfologia del Caquinte (arawak preandino). Trans. by E. Diez-Canseco & M. Davila. Yarinacocha: Instituto Lingüístico de Verano.
- VALDIVIA L. De [1606] 1887. Arte, vocabulario y confesionario de la lengua de Chile, Edición facsimilar de Julius Platmann. Leipzig: B.G. Teubner.
- VALENZUELA P. 2002. Causativization and transitivity in Shipibo-Konibo. In M. Shibatani (ed.), 417-483.
- 2003. Transitivity in Shipibo-Konibo grammar. University of Oregon (Ph.D. Dissertation).

- VAN GIJN R. 2006. A grammar of Yurakare. Nijmegen: Radboud University (Ph.D. Dissertation).
- VÁZQUEZ SOTO, V. 2002. Some constraints on Cora causative constructions. In M. Shibatani (ed.), 197-244.
- VELÁZQUEZ-CASTILLO, M. 2002. Guarani causative constructions. In M. Shibatani (ed.), 507-534.
- VILLAFAÑE, L. 2004. Gramática Yuki. Lengua Tupí-Guaraní de Bolivia. Tucumán: Ediciones del Rectorado, Universidad Nacional de Tucumán.
- WISE M. R. 1971. *Identification of participants in discourse: A study of aspects of form and meaning in Nomatsiguenga*. Summer Institute of Linguistics Publication in Linguistics and Releted Fields 28, Summer Institute of Linguistics of the University of Oklalhoma, Norman.
- 1986. Grammatical characteristics of PreAndine Arawakan languages of Peru. In D. Derbyshire & J. Pullum (eds.), 567-642.
- 1990. Valence-Changing Affixes in Maipuran Arawakan Languages. In D. Payne (ed.), 89-116.
- 2002. Applicative affixes in Peruvian Amazonian languages. In M. Crevels, S. Meira & H. van der Voort (eds.), pp 329-344.

#### Appendix. Illustrative examples of languages with specific sociative causatives markers (families and languages are presented in alphabetical order)

(13)	a.	Araucanian Ancient Araucanian ( <i>i-n</i> b. eat-INFINITIVE 'eat'		-	
(14)	a.	Arawak Nomatsiguenga (Peru y- <i>ogi-monti-ë-ri</i> <sup>35G+M-CAUS-cross.river-NON.F 'He made his son cross</sup>	UT-3sg+m	<i>i-tomi</i> <sub>Зsg+м-son</sub>	
	b.	y-monti-a- <b>hag-</b> an-ë-ri		i-tomi	
		3sg+м-cross.river-ер-саиз.soc 'He made his son cros		3sg+м-so helped him across	
(15)	a.	Panoan Shipibo-Konibo (Peru <i>Yoxaman-ra</i> old.woman:erg-ev 'The old woman mad not enter herself)'	bake child:ABS	bachi-n mosquito.net-ALL	jiki- <b>ma</b> -ke enter-caus-cmpl aito net (but she did

13 We thank W. Adelaar for helping us glossing these examples.

#### 400 ESSAIS DE TYPOLOGIE ET DE LINGUISTIQUE GÉNÉRALE

b.	Yoxaman-ra	bake	bachi-n	jiki- <b>kin</b> -ke		
	old.woman:erg-ev	child:ABS	mosquito.net-ALL	enter-caus.soc-cmpl		
	'The old woman made the child enter the mosquito net (by entering					
	herself)'					
	'The old woman accompanied the child into the mosquito net'					
	'The old woman helped the child enter the mosquito net'					
	-		-			

#### Quechuan

 (16) Cuzco-Collao Quechua (Peru, Cusihuamán 1976, p. 211)<sup>14</sup>
 a. Haku-yá alla-ysi-mu-wa-nki! let's.go-come.on dig.up-caus.soc-over.there-1sg.oBj-2suBj(FUTURE) 'Come on, let us go then. You will help me dig up (the potatoes) over there!'
 b. Alli-chu ri-ra-vsi-ku-wa-v!

Alli-chu ri-ra-ysi-ku-wa-y!
 well-quest go-urgency-caus.soc-reflexive-1sg.obj-2subj.imp
 'Please (lit. Is it all right?), help me go (it is urgent and it is in your own interest)!'

#### Tacanan<sup>15</sup>

(17)	Reyesano	(Bolivia,	Guillaume 2006,	fieldnotes)
------	----------	-----------	-----------------	-------------

a.	M-(a-)ade- <b>tsawa</b> (-a)	тиа	eme	te	iye	ejanana
	1sg-past-walk-caus.soc-past	CONTR	1sg	BM	this	baby.child
	'I helped this baby ch	ild to walk	c (and i	now h	e can walk	by himself)'
h	$\Lambda$ nodzu tozna $ta(a)$	19.0	to	ichu	201120 01110	ta

b.	b. A-padzu-tsawa-ta(-a) PAST-bathe-cAUS.SOC-A3-PAST		ра <sub>кер</sub>	te вм	<i>ichu</i> that	<i>punawe</i> young.lady	te вм	
	ki	ebakwapuna		te	iye	ejanana	kwana	
	1sg.gen	daughter		BM	this	child	PL	

'That young lady is said to have helped my daughter bathe these children'

#### Tupi<sup>16</sup>

(18)

Karo (Brazil, Gabas 1999, p. 83-84)

a.	wat	owã	o=ta-kə-t
	1sg.poss	mother	1sg=caus.soc-walk-ind
	'My motl	ier made me	walk, walking with me'
1.	~		

b.	ön	wat	awe	ta	-bitëp-t
	1sg	1sg.poss	brother	CAU	JS.SOC-CrOSS-IND
	'I mac	le my broth	ner cross, cr	ossin	g with him'
с.	ŋa	toat	01	νẽ	<b>ta-</b> noga-t
	3sg.fem	3reln.p	oss ba	lby	CAUS.SOC-eat-IND

<sup>&#</sup>x27;She fed her baby, eating with him'

- 15 For examples of Cavineña, see (7).
- 16 For examples of Tupinamba and Emerillon, see (5) and (6), respectively. Note that no good example could be found for Yuki.

<sup>14</sup> We thank W. Adelaar for helping us parsing, glossing and translating these examples in English.

(19)	a.		n.õm-Ø ter.dur-iprf	uk house	Ø-'a reln1-nfc	Ø-be <sub>RELN</sub> 1-in
	b.	sariki Ø-ta tapioca RELNI- <i>i-ta-direm-ap</i> RELN2-NFC-be.wet-NMZ 'They are taking	Ø- -NFC REL Ø- 22 REL	- <b>duju-</b> õm.õi LN1-CAUS.SOC-er -puxim LN1-against	nter.dur-iprf	loesn't get wet'
(20)	a.	Kamaiurá (Braz kunu'um-a child-ℕ 'The child ran a	o-jan jawa 3-run jagua	ar-a p ar-N d	anger-N	W <b>İ</b> Abl
	b.	<i>kunu'um-a</i> <sup>child-N</sup> 'He made the ch	o- <b>mo</b> -jan 3-caus-run nild run away fi	jawar-a <sub>jaguar-№</sub> rom the da	pojy-a <sub>danger-№</sub> nger of the ja	wi <sup>ABL</sup> Iguar'
	с.	kunu'um-a <sub>child-ℕ</sub> 'He made the ch	w- <b>ero-</b> jan <sup>3-caus.soc-run nild run away w</sup>	jawa <sub>jagua</sub> vith him fre	r-м dange	er-n Abl
(21)	a. b.	Tapiete (Argent <b>mbi</b> -wata caus-walk 'make him / her <b>mbi-ri</b> -wata caus-caus.soc-walk 'make (him/her	r to walk'	-		
(22)	ã'é <sub>DC</sub>	irapé (Brasil, Prac <i>rãká <b>wer</b>-ó <sub>REC.PAST CAUS.SOC</sub> father brought tl</i>	t doze -come twelve	<i>tokonaré-Ø</i> tucunaré.fish cun <b>aré</b> fish	-ARG NCNT-catc	h-ger 1=CNT-father-ARG
(23)	Mos Khin now		wera' jem е.маsc mus	10 <b>ñe' j</b> st c	<b>äj-khösh-te</b> лиs.soc-sleep-Зма	
(24)	a.	N <b>on-South Am</b> Alamblak (Papu <i>ka-fkne-më-r-m</i> caus-enter-R.PST-3sG- 'He caused them	a New Guinea,	Bruce 1984	•	iking them'

- 17  $\,$  Note that in this language, the sociative causative is an increment on a regular causative marker.
- 18 Note that some of the glosses have been simplified with the help of J. Sakel.

#### 402 ESSAIS DE TYPOLOGIE ET DE LINGUISTIQUE GÉNÉRALE

- b. ha-fkne-më-r-m CAUS.SOC-enter-R.PST-3SG-3PL 'He caused them to enter (something) by entering with them'
  (25) Wolof (Senegal, Nouguier-Voisin 2002, p. 161, p. 186; citing Church 1981) a. Lekk-le na xale bi
  - eat-caus.soc P3s child DEF 'He makes/helps the child eat'
  - b. ba ñu ko tooñee, xuloo-le na ko when N3P 3s cause.harm-ant quarrel-caus.soc p3s 3s 'When somebody caused him harm, he helped him quarrel'

## Table des matières

Présentation	7
Denis Creissels, éléments de biographie	15
Travaux de Denis Creissels	19
Langues africaines	
Kuki-Thaadow : An African tone system in Southeast Asia Larry M. Hyman	31
Le pied métrique dans les langues mandé Valentin Vydrine	53
Cross-linguistic comparison as a heuristic device : What are object pronouns good for ? <i>Zygmunt Frajzyngier</i>	63
La classification nominale : à la croisée des paradigmes Konstantin Pozdniakov	87
Conjoint infinitive clauses in Swahili Thilo C. Schadeberg	107
Le marqueur de l'allocutif pluriel dans les langues bantoues Mark Van de Velde et Johan van der Auwera	119
L'inaccompli en wolof Sylvie Voisin	143

L'expression de la séquentialité en fon Renée Lambert-Brétière	167
The decline of Bantu in Somalia Derek Nurse	187
Three thousand years of language contacts in East Africa Gérard Philippson	201
Remarques sur la construction des faits et l'activisme inhérent de nos constructions catégorielles <i>Robert Nicolaï</i>	215
On the origin of ergativity in Tima Gerrit J. Dimmendaal	233
Variété linguistique et problèmes généraux	
Ergativity in Sorani Kurdish John Haiman	243
On the fused pronoun in Andi, Avar and Andian languages Alice C. Harris	251
Non-finite verbal functions in Abkhaz (North West Caucasian) George Hewitt	269
Dialectics of adnominal modifiers : on concord and incorporation in nominal phrases Yury A. Lander	287
Inessif du verbe, subordination et modalité Gilles Authier	313
Reconstructing proto-syntax : the case of West Caucasian Viacheslav Chirikba	327
Sur la comparaison participiale en basque littéraire (xvɪº - xɪxº siècles) Georges Rebuschi	339
La syntaxe des comparatives corrélatives Anne Abeillé	349
Coordination inclusive et comitative dans les langues océaniennes Isabelle Bril	361

TABLE DES MATIÈRES	613
Sociative causative markers in South American languages : a possible areal feature Antoine Guillaume and Françoise Rose	383
Nom nu et tropisme typologique : le cas de l'arménien Anaïd Donabédian-Demopoulos	403
Remarques sur le marquage du nombre dans le parler occitan de Veyrines-de-Vergt <i>Franck Floricic</i>	417
On the function of numeral classifiers Christian Lehmann Notes sur la latérale en sarde Lucia Molinu-Floricic	435
Person asymmetries in zero expression and grammatical function Anna Siewierska	447 471
Les articles comme source de marque de relativation : l'exemple des langues austronésiennes Alain Lemaréchal	487
L'ambitransitivité : exemples océaniens Claire Moyse-Faurie	505
Un cas de transgrammaticalisation dans les langues polynésiennes Gilbert Lazard	527
The Behaviour-before-Coding Principle in syntactic change Martin Haspelmath	541
Cross-linguistic rarity and language universals Elena Maslova	555
Aspects et modalités de l'existentiel Bernard Pottier	563
Le prédicat : une histoire en peau de chagrin ? Michel Maillard	569
Index des notions	587
Index des langues, des familles de langues et des dialectes	605