Affectedness and viewpoint in Pilagá (Guaykuruan): a semantically aligned case-marking system

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17.1 Introduction*

Pilagá is a South American language spoken in the province of Formosa, Argentina, by approximately 6,000 people. Pilagá enclaves are located in the Chaco region, the most linguistically diverse area in the country, in terms of Native American peoples and languages. The Chaco region extends over three countries, Argentina, Paraguay, and Bolivia.

The purpose of this chapter is to present the analysis of a semantically aligned system that shares some characteristics with both agentive/patientive case marking and active vs. middle voice systems. However, as it happens with other agentive systems, for many verbs the assignment of a particular stem to a prefix seems to be lexicalized. This phenomenon was discussed by Mithun (1991) for North American languages and also for Guaraní. Moreover, Pilagá case marking exhibits a number of oddities (e.g. the encoding of trajectory) which are discussed here with a view to a typological comparison with other systems described in the literature.

The chapter is organized as follows. In section 17.2 I present the two sets of verbal prefixes which constitute the case-marking system and show how they work formally with different verb classes. In section 17.3, I discuss situation types where either sets may occur. In section 17.4 I briefly discuss the interaction between case

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Table 17.1. 'Agentive-patientive' case-marking pronominal prefixes in Pilagá

	Set A	Set B
1SG	<i>S</i> -	ɲ-
2SG	aw - \sim o-	an-
3SG	d-	n-
	t-	
	i - $\sim yi$ -	
	h-	
	Ø-	
	w-	
1PL	s so \sim - sa	
	s $-(a)q$	ŋ <i>-aq</i>
	sqa	\mathfrak{p} qa
	sSa	ŋ?а
2PL	aw $-i \sim o$ $-i$	an $-e$
	awe	ani
	aw $-q(a) \sim -q$ (ae)	
3PL	d?	n?/-d
	t?/-d	
	i ?/- $d \sim y$?/ d	
	ø?/-d	
	td	

marking and voice, arguing that according to our analysis this is not a voice-based system. Final remarks are found in section 17.5.

17.2 Case marking

In Pilagá, pronominal prefixes constitute the only case-marking device, since the language has neither case markers on nouns or free pronouns nor adpositions for nominals. Set A and set B index the subject and a separate third set of prefixes marks the object of transitive and ditransitive verbs. The pronominal affixes are shown in Table 17.1. Here the following conventions are used. Affixes to the left of a row of dots are prefixes and affixes to the right are either suffixed or infixed to the root. Prefixes represent person and suffixes number. Allomorphs are separated by ~. Variation among affixes is neither phonologically conditioned nor, apparently, governed by structural properties of the predicates.

Case marking is partially semantically based. Set A prototypically references a performer or a source, with or without control. Set B prototypically references subject participants affected by the event, or which have no control over it. To

Table 17.2. Object markers in Pilagá						
1SG	yi- \sim - $\mathrm{p}i$	1PL	qom?i			
2SG	an-	2PL	am?i			
3SG	Ø-	3PL	Ø-			

some extent Pilagá set A and set B forms index the semantic role of transitive and of intransitive subjects. The first represents participants conceived as semantic agents, whether the clause is transitive or intransitive; the second set represents subject participants acting as semantic patients or as experiencers, again in both intransitive and transitive sentences. Although this schema accounts for the vast majority of the prefix choices on Pilagá verbs, the assignment of a particular case to a verb is still lexicalized.

A separate set of prefixes mark the object of transitive and ditransitive verbs. Object prefixes can combine with either set A or set B prefixes. From a semantic point of view, object prefixes generally encode a human participant who receives the action denoted by the transitive verb. For this reason, I term this participant Dative. Unlike subject prefixes, which can co-occur with a pronoun or full NP, object prefixes and full pronouns or lexical NPs are mutually exclusive.

The object markers are presented in Table 17.2. They share some similarities with possessive prefixes, and partially also with set B prefixes (Table 17.1), particularly for the 2nd person singular. Note that the paradigm only provides procliticized forms for the singular. First and 2nd person plural are expressed through full pronouns exclusively: *qom?i* 'we' and *am?i* 'you (pl.)'

As noted, the object is indexed morphologically if it is a speech act participant, i.e. a 1st or a 2nd singular person. Third persons singular and plural are always zero. Allomorphs for 1st person singular are lexically assigned. Historically, possessive prefixes and patientive pronominal prefixes seem to be the source for object prefixes in Pilagá, and, like object prefixes, 1st person possessive allomorphs are also lexically assigned.

Besides the specific set of prefixes for 1st and 2nd person singular, full pronouns after the verb (hayim 'I', am 'you') can be used to fulfil the object function, instead of the prefix. Nevertheless, for the coding of plural participants there are no prefixes. Only full pronouns qom?i 'we', am?i 'you (pl.)' are used, which also surface to the left of the verb. In Pilagá there is only one set of independent pronouns: hayim 'I', am 'you', qom?i 'we', am?i 'you (pl.)'. These are used irrespective of whether the participant is a subject or an object.

Thus, to mark the object participant either a pronoun or a prefix is used, but not both. In (1) I provide examples illustrating object prefixes in combination with set A and set B subject prefixes.

(1)	a.	an-ni-qotoSon	an-s-e?et
		20-1в-wake up	20-1A-fix
		'I wake you up.'	'I fix you/dress you.'
	b.	yi-an-qotoSon	yi-aw-e?et
		10-2в-wake up	10-2A-fix
		'You wake me up.'	'You fix me/dress me.'
	c.	yi-n-qopita	yo-qo-y-la?a
		10-3в-like	10-1s-3A-find
		'He likes me.'	'He/somebody finds me.'
	d.	an-n-qopitet-peya	an-qo-y-la?a
		20-3B-love-ASP	20-IS-3A-find
		'He likes you.'	'He finds you.'
	e.	ø-ni-t∫ilan	ø-s-e?et
		30-1в-wash	30-1A-fix
		'I wash him.'	'I fix him/her.'
	f.	an-ɲi-t∫ilan-aq	an-s-e?et-aq
		20-1B-wash-PL	20-1A-fix-PL
		'We wash you.'	'We fix you.'
	g.	yi-an-t∫ilan-i	ni-i-lotake
	J	10-2в-wash-PL	10-3A-look for
		'You (pl.) wash me.'	'They look for me.'
		`1 /	•

A separate subsystem of number affixes is used to encode number of the object. These forms are always suffixed. They occupy the last position in the verbal complex and are optional.

Although object number suffixes have scope over the object participant of a transitive verb, a few instances where the object number suffixes have scope over the intransitive subject have also been found in the data.

Object number suffixes can co-occur with noun phrases or free pronouns. Pilagá has three morphemes for object number: -a 'singular', -to 'paucal' (referring to a small group of referents), and -lo 'plural' (referring to a larger number of entities than those included in the paucal category). Although not difficult to elicit, the paucal number suffix is a very low-frequency morpheme. Usually the plural suffix assumes the pluralizing function, no matter whether there are two or more entities involved.

17.2.1 Overall distribution of case marking

I will start by discussing the distribution of subject case marking for the first two groups of verbs, i.e. those that can only occur with either set A or set B only. Set A and set B are formal labels for classes of forms. I have avoided the use of semantic-sounding terminology such as active/stative or agentive/non-agentive because in Pilagá, for many verbs the grammatical coding does not always align with semantics of agentivity/non-agentivity.

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17.2.2 Set A-only verbs

'I eat.'

In the Pilagá case-marking system, the Agent does not always exercise control over the action; rather, the Agent seems to be a performer or a source with or without control.

The verbs presented in (2) are events characterized as activities (Vendler 1967). These verbs take set A case marking only.

a. se-taga-tak b. se-seta-peya 1A-speak-prog 1A-criticize-нав 'I am speaking.' 'I criticize.' c. s-?alaq d. s-ae-ta 1A-shout 1A-go/move-DIR.out of 'I shout.' 'I come out.' (surge, e.g. out of the water) s-atsiyoso-ye? e. s-ae-yi 1A-go/move-DIR.downwards/ 1A-procede-DIR.thither 'I come from.' (e.g. a far place) 'I go.' (e.g. to the forest) s-at∫iyaqa-yi h. *s-aw*?*o* 1A-procede-DIR.downwards 1A-make 'I descend from.' 'I make/prepare.' se-ke?e se-wala\ae 1A-play 1A-eat

Verbs in (3) involve a physical activity of some sort where the subject is definitely an Agent, according to our definition of Agent as a performer (this even goes for sg t fiyaqa 'descend (genetic lineage)', which should be taken as a metaphorical extension of the motion verb t fiyo fo 'proceed from a location'). But as soon as one starts looking at other verbs that fall into this group, problematic cases appear. For instance, mental activity predicates are also found in the class of set A-only verbs, as seen in (3).

'I play.'

(3) a. s-ateto-n b. sa-yate-n

1A-know-nprog
1A-know-nprog
1 know (a person or place).'

1 know.' (somebody told me)

In fact, some set A-only marked predicates in Pilagá are verbs of perception and verbs of involuntary bodily processes (4a, b). It could be argued that verbs of perception and verbs of mental processes are not subject to control because of a certain lack of volition on the part of the subject participant, as in (3) and (4). In (4), verbs like 'cough' or 'scratch' address a more spontaneous behaviour than, for instance, 'play', 'eat', or 'shout' given in (2). But in all such cases, the participant is marked by a person prefix from set A.

- (4) a. se-senasa-n 1A-scratch-NPROG 'I scratch (myself).'
 - c. s-awe?t-e-yet 1A-observe-epvow-dir 'I observe.'
- b. sa-qaeyoso-n 1A-cough-NPROG 'I cough.'
- d. se-lota-peya 1A-look-нав 'I see something.'

Up to this point, set A-only case-marked verbs might suggest that one general semantic feature for this class is that the subject participant is understood as a performer or as a source, with or without control. However, in Pilagá other verb types, such as states, also appear in this class. Verbs in (5), which are all states (in particular, emotion predicates) where the only participant is more an Undergoer than an Agent, show that 'control' does not play a role in the choice of casemarking here.1

(5) a. s-ekon b. *s-akiko* 1A-headache 1A-sad 'I have a headache.' 'I am sad.' d. sa-soqowat c. s-elwak 1A-sick 1A-be hungry 'I am sick.' 'I am hungry.'

Therefore the examples provided in this section show that set A can occur with different verb classes, and that many of the verbs can be used transitively, by instantiating a patient or a dative object through an object prefix or a postverbal noun phrase. I provide more examples of verbs included in the set A-only casemarked group in (6).

- a. Physical activity verbs: -lew 'to die', -lat 'to kill' (trans./refl.), -opi 'to -noyot 'to obtain/get for oneself', -?ete 'to prepare (for instance, food or fire)', -alik 'to eat', -ke?e/ki 'to feed' -epe(t) 'to fish', -keta 'to point out', -aqa 'to throw', -ne 'to sit/move downwards', -\(\beta it \) 'to move/go', -?\(ot\) fe 'to sleep', -lekte 'to mix', wok 'to sharpen'.
 - b. Mental and motion predicates: -w?at 'to observe', -yak 'to wait', -li 'to hear', -peta 'to think'.
 - c. Statives/positionals: -\(\beta ? iya?t'\) to be bent', -soedi 'to be kneeling down', -kosa 'to be asleep', -neta 'to reside/live/be', -wana 'to have'.
 - d. Speech act verbs: -seet 'to criticize', -set 'to tell/narrate', -taqa 'to speak'.
 - Translational motion verbs: $-pae \sim -ae$ 'go to', -kole(t) 'to fly', -yoq 'to

¹ With regard to the treatment of emotions in some South Asian languages, DeLancey (1984: 10) argues that predicates of emotions are considered 'agentive' or not according to the speaker's assessment of the degree of control which the subject exercised or could have exercised.

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17.2.3 Set B-only verbs

A small group of verb roots take set B prefixes exclusively. The core of the verbs in this set are intransitive predicates where the participant is an Undergoer. Examples are found in (7).

(7) a. ŋ*i-onayak* b. ŋ*i-dot*∫-*i*-ŋ*i* 1B-be.sincere-EPVOW-COMPL 'I am happy.' 'I am sincere.'

Some verbs that describe body postures such as 'standing', 'lying', and 'sitting' also pattern with non-agentive/patientive marking (8). (However, as noted above, 'to be bent' and 'to be kneeling down' pattern with set A case marking.)

(8) a. $n-t\int ate-tapini$ 3B-stand up-DUR
'He is in the process of moving to an upright position.'

b. *ne-na-tapi*n*i* 3B-lie-DUR

'He is in the porcess of moving to an extended (=lying down) position.'

c. ne-s?o\(\text{o}\)-tapi\(\text{i}\)
3B-sit-DUR

'He is in the process of moving to a downwards position.'

Most spontaneous bodily pocesses, also called 'reaction verbs' by Klaiman (1991: 119), have a human participant and select a prefix from set B. (But note that, exceptionally, the verb 'cough' in (4b) is a set A case-marking-only verb.)

If we assume that the core of the B-only group are intransitive undergoer predicates, some exceptions to the core meaning of the class are found. In particular, the next set (10) contains activity verbs where the participant can only be marked by set B forms, but this is not in any given state and does not undergo a change of state. Considering the verb's lexical semantics, there is no apparent explanation for the fact that verbs in (2) co-occur with forms from set A, and verbs in (10) co-occur with forms from set B exclusively.

(10) a. ni-yom b. n-aloqte-n

1B-drink 1B-dominate-ASP
'I drink.' 'I dominate (somebody).'

- c. pa-qat∫-i-pi

 1B-catch-EPVOW-DIR

 'I catch/hunt an animal.'
- d. n-atʃaq-tapini
 1B-run-ASP
 'I am running.'

Other verb roots included in the set B-only group are:

- (11) a. Physical activities: -pet 'to shave (trans./refl.)', -wan?e 'to meet', toyoye 'to spit', -mateda 'to pull out/up', -wana 'to catch', -ato 'to recollect', loon 'to swim', -tʃel 'to have a bath', -kese(se) 'to joke'/'to copulate'.
 - b. positionals: -nae 'to be laid down'.
 - c. Mental and emotion predicates: -kian 'to listen', -towe 'to remember'.

Even if the group of verbs that co-occur with prefixes from set B exclusively constitute a smaller group, one can still argue that some of these are activity verbs that, under some circumstances, can be used transitively or intransitively, where transitivity has no relation to the choice of prefix set. For example, pet 'to shave' can be used intransitively with a reflexive meaning (12a), or transitively (12a) with the addition of a patient object. But there is no change in the prefix class whatsoever: Also, as in (10a–c), a noun phrase can make explicit the affected participant or patient object, but even in those cases this does not affect the choice of prefix set. A verb like aloq(te) may be used transitively is in (10b), or intransitively, with a reflexive suffix as in paloqtel?at 'I dominate myself', again with no change in the prefix class.

- (12) a. n*i-petak* 1B-shave 'I shave myself.'
 - b. *yi-an-petek* 10-2B-shave 'You shave me.'
 - c. so? siya\awa so\ote n-at\setsel

 CLF person before 3B-have.a.bath

 'The person had a bath.'
 - d. so? siya\ananat\fel-a\ananat da? ko\ananat\fel-a\anana
 - e. pa-kia?a-la?t 1B-listen-refl 'I listen to myself.'
 - f. *yi-na-kia*\(\foata-n-a\)
 10-3B-listen-NPROG-OBJNUM.SG
 'He listens to me.'

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In sum, much of the case marking in Pilagá does appear semantically determined, but the fact that many of these verb stems can appear with only one particular prefix set suggests that the system is very lexicalized.

I will now discuss the 3rd group of verbs, which constitutes the vast majority of Pilagá verb stems. This is the group that can occur with either set A or set B markers.

17.2.4 Alternating set A and set B case marking

The possibility for many verb stems to be assigned to one case or to the other suggests that Pilagá subject case marking reflects an agentive/patientive system. If that were so, one would expect that one class of prefixes might embody a participant who is in control of the event described by the verb, while the other class might encode a participant who is not in control. Thus, there should be basically one class containing verbs that correlate with agentivity, and another class correlated with stativity or non-volitionality.

However, I have shown above that in Pilagá, participants coded by set A forms do not always exhibit control or instigation, and that participants marked by set B forms do not always demonstrate affectedness and non-instigation. Verbs such as 'to be sad', 'to be sick', or 'to cough' occur with set A case marking, whereas the subject of verbs such as 'to be sincere' and 'to sneeze' are coded with set B prefixes. In order to proceed with the discussion on the alternation of case marking in Pilagá, it is important to examine what kinds of semantic contrast arise when both sets of prefixes are possible.

17.3 Alternating case marking in Pilagá: situation types

In Pilagá, set A and set B can occur with the vast majority of verb stems. The case-marking variation shows functional similarities among all the constructions encoded by the same set of prefixes. Apart from some lexicalized idiosyncrasies, the generalization for this large class of verbs holds that set A aligns with induced and non-reflexive events, and in general with events where the participant exhibits intentionality when performing an action. Conversely, set B encodes resultative events, reflexive events, and, in general, events where the participant does not exhibit deliberation when performing an action.

17.3.1 'Induced' vs. 'spontaneous' events and 'resultative' states

Two distinctions that set A vs. set B case marking reveals in Pilagá are (a) 'induced' vs. 'spontaneous' events² (or what has been termed the 'causative/inchoative' opposition in the literature, cf. Haspelmath 1993, *inter alia*); and (b) 'induced' vs. 'resultative states'. The connection between 'spontaneous' events and 'resultative states' will be clarified shortly.

² 'Event' is a cover term for any verb class.

Both members of a causative/inchoative verb pair express the same basic situation (generally a change of state, more rarely an atelic process), and differ only in that the causative verb meaning includes an agent participant who causes the situation, whereas the inchoative verb meaning excludes a causing agent and presents the situation as occurring spontaneously.

DeLancey (1984) proposes that agentivity is a superordinate category that includes 'causation' (which in turn subsumes 'volition' and 'proximate causation' entailed by participating in an event with external consequences). Thus, a volitional transitive event (e.g. 'X breaks the cup') is characterized by a two-stage causation scheme; whereas a non-volitional event (e.g. 'the cup broke') will involve one causal chain. On the other hand, a volitional intransitive event (e.g. 'I jump') involves one causal vector 'in which the act of volition causes the act' (DeLancey 1984: 8), and a non-volitional intransitive event (e.g. 'X died') does not define any causal chain.

Croft (1994: 91–3) reconsiders the causation scheme elaborated by Delancey (1984) and restates it in somewhat different terms. He proposes that 'causative', 'inchoative', and 'stative' are part of an idealized 'causal chain' containing three separate segments, i.e. CAUSE-BECOME-STATE. He argues that, since simple events are endpoint-oriented, verbs may encode just the last segment (i.e. stative), or the second and the last (i.e. inchoative), or all three segments (i.e. causative).

We may apply this schema to the description of Pilagá case marking as follows. When an event is conceptualized from its starting point (or source: DeLancey 1990), this situation is encoded by means of set A case marking (recall our characterization of Agent in Pilagá as a performer or source). However, when the event is conceptualized as a change of a state (i.e. the second segment, according to Croft) or as the outcome of an event (i.e. the last segment in Croft's model), the speaker chooses set B case marking.

In the third group of Pilagá verbs, 'causative' vs. 'stative', and 'causative' vs. 'inchoative' meanings correlate with alternating case marking, as shown in (13a, b) and (13c, d).

- a. s-ewat-eye 1A-open-DIR.forward 'I open (e.g. the door).'
 - c. [yit[iyat] $[yi-i-t \int iya-t]$ 10-3A-tight-prog 'They/it pinch(es) me.'
 - e. *n-t∫iya-at*?at 3B-tight-REFL 'They shrank.'
- b. [newatayi] n-ewat-tayi 1B-open-COMPL 'It (e.g. the door) is open.'
- d. sa-tsiya-lo 1A-tight-objnum.pl 'I tighten them.'

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It is, however, important to underscore that suffixes also play a role in shaping either causative, inchoative, or stative verbal meanings. For example, in (13), not all causatives or all statives receive the same type of verbal suffix; rather, it is the verb's lexical semantics that motivates the occurrences of the specific suffixes. 'Open' (13a, b), on the other hand, is marked with an aspectual suffix -(ta)yi 'completive' in the stative.

Nevertheless, it is important to note that for some verbs the causative/inchoative and the causative/stative alternations do no correlate with case marking changes. (14b) is an example where the stative is an adjectival form, with no case markers added; that it is not a verb is shown by the fact that the non-finite *qaqata* 'to be dry' is the same for 1st and 2nd person. The verb 'break' in (14c, d) shows a somewhat similar situation. Case marking does not make any contribution to the causative vs. inchoative distinction, since in both meanings the subject is grammatically categorized as an Agent. Here, what marks the difference between the causative and the inchoative construction is the aspectual marker -yi 'completive' in (14d). Conversely, note that in (14c) for the causative meaning the verb stem has a directional suffix -yi 'DIR.downwards'. However, for 'break' the difference between the causative and inchoative does correlate with case marking, as (14c, d) show. Case marking proves to differentiate the process vs. the state, as the addition of (14e) demonstrates:

- (14) a. se-qayat

 1A-dry
 'I dry.'
 c. [dolat∫iyi]

 [d-ola-t-iyi]

 3A-break-VFT-DIR.downwards
 'He breaks (something).'
 e. d-ola

 3A-break
 'It is broken.'
- b. hayim ø-qaqa-ta PRO.1SG 3A-dry-RES 'I am dry.'
 d. d-ola-yi 3A-break-COMPL 'It broke.'

Sometimes different stems are used for causative vs. inchoative meanings (this is what Haspelmath (1993: 92) calls 'suppletive' alternations for causative/inchoative verb pairs). Some examples are given in (15). (15a–c) show that the causative/inchoative reading for the concept 'lose' does not depend upon case marking. (15b) represents the accomplished process with a verb stem like *som* 'to get lost', while (15a) with the stem *gem* 'to lose' presents the event from the point of view of the entire process. But most important here is that in both examples the participant is marked by set A forms. (15c, d) constitute another instance where the inchoative and the causative concepts are not derived from the same stem, and where case marking also does not participate in coding the causative/inchoative semantic distinction.

(15) a. se-gem

1A-lose(TR)

'I lost something.'

c. ya-lat

3A-kill

'He kills/ed someone.'

b. se-somak

1A-lose(INTR)

'I got lost.'

d. so\ote yi-lew

already 3A-die

'He died already.'

17.3.2 Events with high vs. low intentionality

With a few verbs denoting mental and speech predicates, the choice of one set vs. another set of prefixes may indicate the degree of intentionality of the subject participant. Set B indicates that his/her intention is not deliberate, while set A marking indicates it is more purposeful. See (16) for an illustration.

(16) a. $pi-t \int o \Omega dt$

1в-put forward/tell/present

'I introduce myself.'

b. an-setsosot

20BJ-1A-put forward/tell/present

'I introduce you.'

ant∫o\ot

2в-put forward/tell/present

'Introduce yourself!'/'You introduce yourself.'

d. awtsofot

2A-put forward/tell/present

'Tell something.'

e. pa-nom-ta qal?i

1B-know-RES yesterday he got up

'I know he got up (I heard or saw him accidentally, I was there).'

sa-nom-a

1A-know-objnum.sg

'I have knowledge of something (i.e. a person or place because somebody told me).'

g. ni-lot-an?a

1B-look-EPVOW-DIR.downwards

'I look downwards.' (e.g. the subject is up in a tree)

h. selot∫iyi

[se-lot-iyi]

1A-look-DIR.in a straight line

'I look at something/somebody insistently, without moving my eyes.'

i. paposo-tapini

1в-hide-dur

'I am hiding (or pretending).'

j. sanosot so?

1A-hide CLF.away proper.name

Juan

'I convinced Juan.'

As shown in (16a, b), the speech verb $t \int o \cdot v$ (warn' can be associated with one (16a) or two arguments (16b). This is indicated by a different prefix choice plus the aggregate of an object participant marked on the verb (see an- '2O' in 16b). When no second human participant is ostensibly involved, the degree of intentionality on the part of the subject participant is still indicated by alternating prefixes from set A and set B (16c, d). The verb noma 'know' (16e, f) also exhibits alternating case marking from both sets; but the aspectual suffix -ta 'resultative', which derives activities into states, is also signalling that the event is seen from the point of view of its results. In such a case the subject participant is marked as an Undergoer (16e), unlike (16f), where case marking indicates a greater involvement. The last pair (16g, h) exemplifies the case of a verb lot 'look' that can take either one (16g) or two arguments (16h) marked on the verb. In (16h), the object participant is zero marked, since it is 3rd person. (16g) indicates that the subject participant is not looking at a specific target or with any intention; whereas (16h) signals that he or she is looking at something or somebody on purpose.

17.3.3 Reflexive/non-reflexive events

The choice may convey a difference in 'reflexive/non-reflexive' meaning. A 'reflexive' event involves one participant, which stands in an Initiator/Endpoint relation to itself (Kemmer 1993: 52). To obtain the reflexive meaning, -l?at 'reflexive' may also be added to the root (cf. 17), though this is not necessarily the case. For some verbs, case marking alone suffices to yield the reflexive vs. non-reflexive interpretation (cf. 18). 'Reciprocality', indicated through -?at, is another meaning associated with non-agentive in Pilagá.

The pairs in (17) and (18) contrast 'reflexive/non-reflexive', and also illustrate the reciprocal usage of set B marking with a reciprocal suffix -?at, as opposed to the non-reciprocal action with two participants. (17a) is reflexive, (17b) non-reflexive, and both are marked with set B prefixes. According to the glosses (i.e. 'look at myself' in (17a) and 'realize' in (17b)), (17b) is also marked with a set B prefix even though non-reflexive. However, the sense is not 'reflexive' since, instead of a reflexive suffix, a directional marker shows up on the verb to derive the meaning of 'to realize' (lit. look forward). (17c) is a variation on (17a), based on a different grammatical person.

(17) a. pi-lo-l?at

1B-look-REFL

'I look at myself (in the mirror).'

b. pi-lot-eye

1B-look-DIR.forward

'I realize' (as if one's mind opens)/'I open my eyes (when I wake up).'

c. an-lo-l?at

2B-look-REFL

'You look at yourself (in the mirror).'

The following pairs illustrate reflexive/non-reflexive and recipocal/non-reciprocal constructions in Pilagá.

- (18) a. se-kode-eye 1A-pour-DIR.forward 'I pour' (a liquid, on a surface or on somebody).'
 - c. am s-at[et PRO.2SG 1A-offer 'I offer you something.'
 - am sa-wana PRO.2SG 1A-meet 'I meet you.' y-alat

'I clean myself.'

3A-kill 'He kills/ed (someone).'

- b. nikodel?at [ni-kod-e-l?at] 1B-pour-epvow-refl 'I pour (liquid) on myself.'
- d. n-atseta-a?t 1B-offer-RECIP 'We offer (something) to each other.'
- na-wana?at 1B-meet-RECIP 'We meet each other.'
- h. n-alat-e-l?at 3B-kill-EPVOW-REFL 'He killed himself.'

'I clean somebody/something.'

While some verbs require a specifically reflexive suffix to express the reflexive meaning, others convey this meaning by means of case marking only. In (19) I provide examples of reflexive/non-reflexive constructions, which are based solely on alternating case marking.

(19) a. net?et b. set?et ıв-fiх 1A-fix 'I fix him/her.' 'I fix myself.' c. nt?amen d. y-?amen зв-spread 3A-spread 'He/she makes up (e.g. as 'He/she spreads something with facial makeup).' (e.g. grease).' f. si-yo e. n*i-yo* 1A-clean ıв-clean

Most examples in (19) are body-care verbs. The lack of a reflexive marker in (19), as opposed to what we see in (18), supports the idea of Haiman (1983) regarding an economic motivation in language. Since the expectation for washing, shaving, and similar actions is that the person will perform the action upon him- or herself, such verbs do not require an over-reflexive object; this could also explain why grooming or body-care verbs do not require the reflexive marker in Pilagá either. A verb like 'hide', as in (19e-g), does not immediately fit into the category of body-care verbs, although it does denote an event where the body is the locus of the action.

One hypothesis that deserves further work is that the verbs in (18) differ from those in (19) in terms of the degree of transitivity involved. The first group of predicates generally presupposes a second (human) participant and are conceivably higher in semantic transitivity (Hopper and Thompson 1980). Transitivity is downgraded in reflexive constructions (Hopper and Thompson 1980: 277). Thus, in (18), 'reflexivity' is less expected and, as such, it is 'marked' by choice of prefix set on the verb.

In the next section I will discuss one last property of the Pilagá case-marking system, the encoding of 'trajectory of the event'.

17.3.4 Trajectory of the event: motion towards/away from a vantage point

For one group of stems that may take either set of prefixes, case marking describes opposed orientations of the spatial trajectory of the subject participant. The group consists of translational motion verbs involving motion to a different location, but also includes verbs that do not literally imply that the subject moves, such as 'to buy'/ 'to sell', 'to learn' / 'to teach', and 'to plough' / 'to harvest'. Thus, nonmotion verbs of this group describe an imaginary trajectory relative to some point of reference.³

The point of reference does not necessarily coincide with the speaker's location. (I will return to this point after showing examples in (20).)

- (20) a. an-yelaq 2B-go back 'You come back here.'
 - c. *n-yela-wo*3B-go back-DIR.outwards
 'He comes back (he arrives here).'
 - e. p-ek-iseyem

 1B-go-dir.upwards

 'I move like dancing or jumping in place.'
 - g. jii-do-wo
 1B-carry-dir.outwards
 'I bring (lit. carry here).'
 - i. na-ta-wo3B-move-DIR.outwards'He/she is coming.'

- b. aw-yelaq 2A-go back 'You go back there.'
- d. *yi-yela-wo*3A-go back-DIR.outwards
 'He went back (to the place where he came from).'
- f. s-ek-iseyem
 1A-go-DIR.upwards
 'I go up.'
- h. se-do-wo
 1A-carry-DIR.outwards
 'I take (lit. carry there, inside).'
 (The speaker is outside.)
- j. ta-ta-wo3A-move-DIR.outwards'He/she is going (to a place which does not coincide with the speaker's).'

³ Klein (1981) had proposed the existence in Toba of a similar parameter which she calls 'directionality', subdivided into 'adcorporeality' vs. 'abcorporeality'. According to Klein, this parameter accounts for the distribution of subject prefixes for all verb stems. In a similar vein, Velázquez-Castillo (this volume) proposes a semantic interpretation of events marked as respectively active vs. inactive in terms of 'centrifugal' (directionality towards the event source) vs. non-directional or 'centripetal' events.

Note that in (20a-j) the stem form is clearly irrelevant for the choice of the prefix and that motion verbs (20a-j) carry a directional suffix, independently of the fact that the case marking indicates 'trajectory' relative to a point of reference. Very importantly, the suffix is also coding path or trajectory. The point of reference coincides with the speaker location in (20a, b) and (20c, d). The gloss in (20e) suggests that the point of reference is the speaker's location as the subject participant moves within that space. Unlike (20e), in (20f) the speaker moves towards that point of reference, from the starting point, in an upwards direction, as indicated by the directional suffix. In (20i, j) the 'coming' or 'going' can only be predicated from the stance of the speaker who sees the event participant approaching towards or away from him/her.

Certain motion verbs have co-lexicalized together with a directional suffix, to the extent that their basic stem form now contains a directional suffix. When the form for the verb 'bring' or 'take' is requested in direct elicitation, speakers will provide the expressions transcribed in (20g, h); but the same root can also combine with other directional suffixes (e.g. sedoyet 'I receive', sedoyi 'I carry something from the inside to the outside').

Now, the non-motion verbs provided in (21) do not have directional markers attached, though valence suffixes may be relevant to the meaning of these constructions. 'Sell'/'buy' exhibit different stems, although the distribution of set A/set B case marking for 'sell/buy' respectively holds. In the case of 'teach/learn' and 'plough/harvest' the verbs differ in case marking, the stem being the same. In these examples, case marking indicates that a trajectory is implied; the only participant is affected when the event is done in his/her own interest, and thus set B case marking occurs (even though the affected participant may also be an agent, as in 'buy' or 'cultivate'). When the subject participant is a performer and a second participant is involved as the affected Undergoer, set A forms occur.

- a. na-pasayen (21) ıв-learn 'I learn.' c. na-poyaq 1в-cultivate
 - 'I cultivate or sow for myself (i.e. my own field).'
 - e. n-men-a?t 3B-give-RECIP 'They give each other (exchange) things.'
- b. sa-pasayen-t-asan 1A-learn-VFT-VAL 'I teach.'
- d. sapoyasan [sa-poyaq-asan] 1A-cultivate-VAL 'I harvest (i.e. for somebody else).'
- de-men-asan 3A-give-VAL 'He/she sells.'

haso? payentanasae yi-ede-leye F.CLF teacher 3A-write/carve-Loc.on 'The teacher writes (e.g. something on the blackboard).'

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h. hayem n-ede-leve
PRO.1SG 1B-write/carve-LOC.on
'I sign (on a piece of paper).'

17.4 Discussion: case marking and voice

It has been suggested for Toba (which is Pilagá's closest relative within the southern branch of the Guaykuruan family) that the cognates of what I have named 'set A' and 'set B' are part of a voice system and respectively encode the distinction 'active' vs. 'middle' (Censabella 1997). Censabella analyses all instances of the two sets as marking active vs. middle voice. Her interpretation of middle voice in Toba is based on Kemmer's (1993) survey of middle voice languages. For Kemmer, middle voice is tied to 'reflexivity' (in body action, body posture, and grooming verbs) and 'reciprocality', but also to other middle situation types such as spontaneous events (with lack of volitional initiation), passive-middle events (where the external causer is pragmatically de-emphasized: cf. Kemmer 1993: 147), and mental processes, which naturally exhibit low control, will, or instigation. In sum, middle events comprise situations where the initiator is also an endpoint, or an affected entity, or where the event is characterized by a lower degree of participant elaboration (Kemmer 1993: 243). All these functions are part of what set B case marking does in Pilagá. However, in Pilagá, the expression of 'reflexivity' is also a function of the reflexive suffix. In those cases where the verb does not necessitate a reflexive marker (i.e. as in 18), set B constructions are semantically, though not structurally, reflexive.

The distribution of case marking in Pilagá demonstrates that most stems of the set A-only group are activities, with or without control. In such cases, the subject participant is mapped onto the set A case marking since he or she is perceived as non-affected. (The grammatical changes that have caused certain states or positional verbs to became part of this group remain synchronically obscure.) The second group, comprising stems which are exclusively set-B marked, is comparably smaller and also has some exceptions to the core meaning of the group. These verbs are most usually non-actions where the only participant is grammaticized as if it were an Undergoer (a 'controller', to use the terminology of Klaiman 1991). The group of verbs that may take either case is large, and pattern semantically with middle meanings, which makes this particular system look voice-oriented.

However, the array of meanings that set B case marking encodes covers other senses beyond what have been characterized as typical middle functions (in particular, 'trajectory of the event' with motion-cum-translation and non-motion verbs (a feature that to my knowledge has not been documented for agentive or active systems so far). Furthermore, the distribution of case marking for the first two groups (i.e set A-only and set B-only) is not entirely

predictable. In my analysis, case marking overlaps with middle meanings, but 'middle' is a by-product of the set B prefix class in Pilagá. Based on the description provided in the preceding sections, I argue that the Pilagá system is generally organized on the basis of 'agentivity', where the set B paradigm semantically includes some middle meanings, such as 'reflexivity' and 'spontaneous events'.

17.5 Conclusion

The general characteristics of the Pilagá person-marking system is that choices between sets are based on whether the subject participant is the agentive doer of an activity verb or an affected entity. In the final analysis, however, set A and set B are best regarded as formal labels used to designate each prefix class, which need not imply that the subject argument position is filled by a participant who is invariably perceived as either the semantic Agent or the semantic Undergoer of an event or state. The semantic case roles of Agent and Undergoer are nevertheless necessary in order to account for the fact that many verb stems can alternatively encode the grammatical subject by both sets, leading to different conceptualizations of the same event.

I would like to propose the existence of two semantic parameters in connection with this system, which ultimately seem to trigger the distribution of case marking:

(a) Viewpoint.⁴ I argue that in Pilagá an event is viewed from the stance of its initial viewpoint or from its endpoint. Pilagá appears to be sensitive to a model of causation (as proposed by DeLancey 1981 and reinterpreted by Croft 1994). This means that 'causative', 'inchoative', and 'stative' indicate different elaboration types of event, and this elaboration exhibits some correlation with pronominal case marking in this language. Similar systems have been documented in the literature. Merlan (1985: 351) notes that in Arikara (Caddoan), inchoativization is marked by a shift in the prefix inflectional class. However, as I said, this correlation is not 100 per cent consistent too, which implies that sometimes the distinction 'causative' vs. 'inchoative' and/or 'stative' does not align with alternating set A and set B in Pilagá.

'Viewpoint' also accounts for the fact that pronominal case marking encodes 'trajectory of the event', by which participants 'move', either in a physical or a metaphorical sense, towards a specific point of reference which may or may not coincide with the speaker's location.

⁴ The proposal of such an explanatory parameter for semantic alignment systems is not new (cf. DeLancey 1981, which constitutes the first work suggesting a connection between 'viewpoint', agent/patient categories, and semantic alignment).

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(b) Affectedness. When the event is conceptualized from its endpoint, the subject participant is affected. 'Affectedness' is a crucial parameter in voice systems, and this is the reason why 'middle' meanings can be obtained from set B case marking. An affected participant furthermore lacks intentionality, volition, or purpose. Some verbs denoting mental actions and states may convey such distinctions by set B forms, although the system also exhibits pervasive leticalization, which results in the case marking by set A forms of certain mental predicates.