The acquisition of ergativity in Inuktitut*

Shanley Allen
University of Kaiserslautern

One potential challenge for children learning Inuktitut comes from the ergative case marking system, because of the contrast between the ergative system in morphology and the accusative system governing syntax. However, no studies have yet been published focusing on how Inuktitut-speaking children acquire ergativity. In this chapter, we investigate this process using naturalistic spontaneous speech data from four Inuktitut-speaking children aged 2;0–3;6. We find that these children largely avoid producing structures that require ergative morphology. Analysis of caregiver speech and spoken narratives from older children and adults shows that this avoidance occurs regardless of age. We conclude that Inuktitut may be in the process of historical change from an ergative-absolutive system to a nominative-accusative system, and that the children’s language reflects that change.

Introduction

All Eskimo languages, including Inuktitut, are morphologically ergative. Subjects of transitive verbs (henceforth A) are marked with ergative case while subjects of intransitive verbs (S) and objects of transitive verbs (O) are both marked with absolutive case. However, like many other morphologically ergative languages (Anderson 1976), Inuktitut follows a nominative-accusative system in syntax, relying on the categories ‘subject’ (i.e., A and S) and ‘object’ (i.e., O) for determining the structure of relative clauses, antecedent reference marking, and the like. This

* This research was funded by the Kativik School Board of Northern Quebec and by the Social Sciences and Humanities Research Council of Canada. I thank all the children and their families, the students and their schools, and the adults who participated in the studies discussed here. I also thank Martha Crago, Lizzie Ningiuruvik, and Diane Pesco for their collaboration in the studies; numerous Inuit for their assistance in data collection, transcription, and analysis; and Edith Bavin, Sabine Stoll, and the participants in the Acquisition of Ergativity Workshop (Leipzig 2010) and the Kaiserslautern Scientific Writing Group for comments on previous drafts of this work.
poses a learning problem for children, because they need to learn one system for syntax and another for morphology (Pye 1990; Van Valin 1992). This is very different from the situation in languages like English and German, where children need to learn just one system, nominative-accusative, for both syntax and morphology.

In the present chapter, we investigate the acquisition of ergativity in Inuktitut to gain insight into this learning problem. Although several articles have been published on the acquisition of the Eskimo-Aleut languages – in particular on Inuktitut (Allen 1996, 1998, 2000; Allen & Crago 1996; Allen, Crago & Pesco 2006; Allen & Schröder 2003; Crago & Allen 1998, 2001; Parkinson 1999; Swift 2004) and on West Greenlandic (Fortescue & Lennert Olsen 1992) – none of these studies have focused on ergativity per se. Several possible patterns of early acquisition are possible. Because of the mismatch between morphologically ergative and syntactically accusative systems in Inuktitut, we might expect that children will overgeneralize use of ergative morphology to all subjects initially, only later restricting ergative marking to A subjects. Alternatively, following Pinker’s (1984) Semantic Bootstrapping Hypothesis which claims that children initially break into grammatical relations by focusing on thematic roles, we might expect that children would initially restrict ergative marking to verbs with highly agentive subjects in A position and only later extend ergative marking to A subjects with other thematic roles. A further possibility is that children will experience no problem with ergative marking and use it correctly from the outset.

The remainder of this chapter is structured as follows. First, we lay out relevant aspects of the structure of Inuktitut with a particular focus on the expression of ergativity. We then investigate the use of ergativity in four Inuktitut-speaking children aged 2;0 to 3;6. To determine whether their rare use of ergative morphology is related to their developmental stage or to some feature of the language itself, we then explore ergative marking both in a sample of caregiver data and in elicited narratives from older children and adults. In the penultimate section, we review findings from a published study of the acquisition of West Greenlandic to see whether the patterns in Inuktitut hold for the one other Eskimo-Aleut language for which we have relevant acquisition data. Finally, we summarize the findings and discuss their relevance for our understanding of the acquisition of ergativity.

Structure of Inuktitut

The Eskimo-Aleut language family stretches across the circumpolar north from Siberia to Greenland, comprising between four and sixteen languages depending on how a given author treats the differences between language and dialect. These
languages are spoken by some 140,000 people (see Dorais 2010 for more information). Arctic Quebec Inuktitut (hereafter simply Inuktitut), the language discussed in this chapter, is spoken by some 9500 Inuit throughout the 14 Inuit communities in arctic Quebec in northeastern Canada (Statistics Canada 2006). Virtually all Inuit in this region are native and fluent speakers of the language, using Inuktitut as their main language at home and usually at work as well. In addition, virtually all children learn Inuktitut at home as their native language. Numerous studies attest to the fluent acquisition of Inuktitut by preschool Inuit children in arctic Quebec (e.g., Allen 1996; Crago & Allen 1998; Swift 2004), as well as to the strong Inuktitut abilities of school-aged Inuit children in the early grades (e.g., Allen, Crago & Pesco 2006; Crago, Annahtak, Doehring & Allen 1991; Wright, Taylor & Macarthur 2000). A few children – with either two fluently bilingual parents or two parents who have different native languages – also learn a second language from birth (e.g., Crago, Chen, Genesee & Allen 1998; Allen, Genesee, Fish & Crago 2002; Zwanziger, Allen & Genesee 2005; Allen 2007). In addition, virtually all Inuit between the ages of 8 and 50 speak English and/or French to varying degrees because schooling is in one of those languages from at least grade 3 (age 8) on. English and French also commonly enter the communities through television, movies, radio, and non-Inuit inhabitants and visitors including teachers, nurses, service personnel (e.g., hydro, electricity), and a few non-Inuit married to Inuit. Smaller Inuit communities (i.e., population <400) typically have a non-Inuit population of 5% or less, so Inuktitut is the predominant language used. Larger communities typically have a higher non-Inuit population, often as much as 25%, so English and French are more common in those communities and are also frequent in the workplace (Dorais 2010; Dorais & Sammons 2002; Taylor & Wright 1990).

The default word order in Inuktitut is Subject-Object-Verb, although word order is quite free and ellipsis of both subjects and objects is very common. Morphosyntactically, Inuktitut is polysynthetic in that it allows up to 10 or more morphemes per word and can express in one word what would be a complete sentence in a language like English. It is also agglutinative: bound morphemes are expressed by affixes rather than changes in vowel or stress patterns, each word-internal affix typically represents one unit of meaning (e.g., plural, present tense), and the form of the affix changes very little as a result of contact with other affixes. Inuktitut has over 900 portmanteau verbal inflections that mark verbal modality as well as person and number of subject and object; over 300 portmanteau nominal inflections that mark case and number as well as person and number of possessor if applicable; and over 400 word-internal derivational suffixes that represent categories of tense, aspect, emphasis, and the like.

Like all Eskimo languages, Inuktitut is morphologically ergative. Thus, subjects of intransitive verbs (as in 1a) and objects of transitive verbs (as in 1b) are
both marked by absolutive case, while subjects of transitive verbs (as in 1c) are marked by ergative case.

(1) a. *Qimmiapik qialirtuq.*  
qimmiq-apik-Ø qia-liq-juq  
dog-DIM-ABS.SG CRY-INC-PAR.3Ss₁  
‘The cute little dog is crying.’ (Louisa 3;2)

b. *Miaji takulaunngitait.*  
Miaji-Ø taku-lauq-ngit-jait  
Mary-ABS.SG SEE-PAST-NEG-PAR.2S.S.3S.O  
‘You didn’t see Mary.’ (Lizzie 2;10)

c. *Kinaup pijanga.*  
kina-up pi-janga  
who-ERG.SG DO-PAR.3S.S.3S.O  
‘Who is doing this?’ (Elijah 2;5)

Ergativity is marked consistently throughout the morphological system; there are no ergativity splits based on person, aspect, tense, or anything else. Importantly, Inuktitut is not syntactically ergative. In constructions such as relative clauses and switch reference, intransitive and transitive subjects pattern together with objects patterning differently, as in nominative-accusative languages.

Ergativity is visible in Inuktitut only in nominal inflections and demonstratives. Third person pronouns do not occur in Inuktitut; a well-developed set of demonstratives is used instead. Although Inuktitut has first and second person

---

1. The following abbreviations are used in glosses throughout this chapter:
Nominal case: ABS = absolutive; ALL = allative; ERG = ergative; LOC = locative; MOD = modalis.
Verbal modality: CTG = contingent; CTM = contemporative; DS = different subject (for subordinate clauses); ICM = incontemporative; IMP = imperative; IND = indicative; PAR = participial (functionally equivalent to indicative).
Word-internal morphology: ATP = antipassive; CAUS = causative; COP = copula; DIM = diminutive; EMPH = emphatic; FUT = future; GERUND = gerund; HAB = habitual; INCP = inceptive aspect; NEG = negative; NOM = nominalizer; PASS = passive; PAST = past; PEJ = pejorative; POL = politeness (preceding imperative); PRSP = prospective aspect.
Verbal inflection (e.g. PAR.3S.S): 1 = first person; 2 = second person; 3 = third person; 4 = fourth person; s = singular; d = dual; p = plural; x = any number (i.e., singular, dual, or plural); S = subject; O = object
Nominal inflection (e.g. ABS.SG): SG = singular; DU = dual; PL = plural.
Possessed nominal inflection (e.g. ERG.3S.sg): 1 = first person possessor; 2 = second person possessor; 3 = third person possessor; S = singular possessor; D = dual possessor; P = plural possessor; X = any number (i.e., singular, dual, or plural); sg = singular possessum; du = dual possessum; pl = plural possessum.
pronouns, they are not permitted in subject or object position. This means that first and second person subjects and objects can only be realized in verbal inflection, and have no independent (pro)nominal form where ergativity would be marked.

Nouns and demonstratives in Inuktitut are obligatorily marked for three numbers – singular, dual, and plural – as well as eight cases – ergative, absolutive, modalis, locative, allative, ablative, translative, and simulative (Dorais 1988). Modalis case marks indirect objects as well as “objects” of antipassive constructions. The other cases are analogous to prepositions in English. For example, locative case expresses location (e.g., English in, at) while translative expresses movement across (e.g., English across, over, through). Case markers and basic demonstratives for ergative, absolutive, and modalis case are shown in Table 1. As is evident from Table 1, ergative and absolutive markings differ only in the singular form, not in the dual or plural.

The system becomes considerably more complex when considering possessed nouns, because both person and number of possessor as well as number of possessum (i.e., object possessed) are marked, in addition to case, in one portmanteau inflection. This is shown in Table 2, where it is clear that the ergative and absolutive are distinguished for every form except the one marking a dual noun possessed by a second person dual possessor (e.g., qimmi-ittik [dog-abs.2Ddu] ‘your (du) two dogs’). Note that forms are often similar for a given possessor within the ergative (e.g., first plural possessor -tta for both singular and plural possessums) or within the absolutive (e.g., first plural possessor -vut for both singular and plural possessums). Importantly, however, the ergative (e.g., -tta) is distinguished from the absolutive (e.g., -vut).

The examples in (2) illustrate the different ergative and absolutive forms for a sample possessed noun – the singular third person noun ataata ‘father’ possessed by a first person singular entity (i.e., ‘my’). Example (2a) shows the possessed noun

| Table 1. Case marking paradigm for Inuktitut non-possessed nominals |
|----------------------|----------------------|----------------------|
| **Noun** | **Demonstrative** | **Noun** | **Demonstrative** | **Noun** | **Demonstrative** |
| Singular | -up | uuma | -Ø | una | -mik | uminga |
| Dual | -Vk | ukua | -Vk | ukua | -Vnnik | ukuninga |
| Plural | -it | ukua | -it | ukua | -nik | ukuninga |

2. Terms for the cases differ throughout the literature on Inuit languages. Some of the more common alternatives are: ergative = relative; absolutive = basic; modalis = secondary, instrumental; translative = prosecutive, vialis; simulative = equative.
Table 2. Case-marking paradigm for Inuktitut possessed nouns

<table>
<thead>
<tr>
<th>Possessor</th>
<th>Singular</th>
<th>Dual</th>
<th>Plural</th>
<th>Ergative</th>
<th>Singular</th>
<th>Dual</th>
<th>Plural</th>
<th>Absolutive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 singular</td>
<td>-(m)ma</td>
<td>-Vmma</td>
<td>-(m)ma</td>
<td>-ga</td>
<td>-Vkka</td>
<td>-kka</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 dual</td>
<td>-nnuk</td>
<td>-Vnnuk</td>
<td>-nnuk</td>
<td>-vuk</td>
<td>-Vppuk</td>
<td>-vuk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 plural</td>
<td>-ttta</td>
<td>-Vttta</td>
<td>-ttta</td>
<td>-vut</td>
<td>-Vvut</td>
<td>-vut</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 singular</td>
<td>-ppit /-vit</td>
<td>-Vppit</td>
<td>-ppit /-vit</td>
<td>-it</td>
<td>-Vkkik</td>
<td>-tit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 dual</td>
<td>-ttik</td>
<td>-Vttik</td>
<td>-ttik</td>
<td>-tik</td>
<td>-Vttik</td>
<td>-tik</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 plural</td>
<td>-tsi</td>
<td>-Vtsi</td>
<td>-tsi</td>
<td>-si</td>
<td>-Vsi</td>
<td>-si</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 singular</td>
<td>-ngata</td>
<td>-Vngitta</td>
<td>-ngitta</td>
<td>-nga</td>
<td>-Vngik</td>
<td>-ngit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 dual</td>
<td>-ngata</td>
<td>-Vngitta</td>
<td>-ngitta</td>
<td>-nga(k)</td>
<td>-Vngik</td>
<td>-ngit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 plural</td>
<td>-ngata</td>
<td>-Vngitta</td>
<td>-ngitta</td>
<td>-ngat</td>
<td>-Vngik</td>
<td>-ngit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

as an intransitive subject marked with absolutive case, example (2b) as a transitive object marked with absolutive case, and example (2c) as a transitive subject marked with ergative case.

(2) a. *Ataataga itirtuq.*
   ataat-a ga    itiq-juq
   father-abs.1Ssg enter-par.3sS
   'My father is coming in.' (Lizzie 2;6)

b. *Ataataga siniqunngilauruk.*
   ataat-a ga    sinik-qu-ngit-lauq-guk
   father-abs.1Ssg sleep-tell-NEG-POL-IMP.2sS.3sO
   'Tell my father not to sleep.' (Elijah 2;5)

c. *Ataatamma kaivaluakainnatanga.*
   ataat-a mma kaivalua-kainnaq-janga
   father-erg.1Ssg turn-PAST-PAR.3sS.3sO
   'My father spun it.' (Elijah 2;9)

Note that the affixes marking ergative forms in Inuktitut are identical to those marking possessive on the possessor as shown in (3a) for singular -up and in (3b) for plural -it.

(3) a. *Jaaniup illunga.*
   Jaani-up    illu-nga
   Johnny-erg.sg house-abs.3Ssg
   'Johnny's house.'
b. *Piarait pinnguangit.*

piaraq-it pinnguaq-ngit
baby-\text{erg/abs}\text{-sg} toy- abs.\text{3Ppl}

‘The babies’ toys.’

Subjects and objects may appear in three forms in Inuktitut: as lexical noun phrases (4), as demonstratives (5), or omitted (6). As noted earlier, ellipsis of both subjects and objects is very common, especially in spontaneous speech. Lexical NPs appear much more frequently as objects than as subjects, while demonstratives appear frequently in both positions (Allen & Schröder 2003).

(4) *Jaani-up tuttuviniq-∅ niri-kainna-tanga.*
Johnny-\text{erg}\text{-sg} caribou\text{-meat-}\text{abs}\text{-sg} eat-\text{just-}\text{par.}\text{3sS}
‘Johnny ate the caribou meat.’

(5) *Uuma tuttuviniq-∅ niri-kainna-tanga.*
this\text{-one-}\text{erg}\text{-sg} caribou\text{-meat-}\text{abs}\text{-sg} eat-\text{just-}\text{par.}\text{3sS}
‘This one ate the caribou meat.’

(6) *∅ tuttuviniq-∅ niri-kainna-tanga.*
∅ caribou\text{-meat-}\text{abs}\text{-sg} eat-\text{just-}\text{par.}\text{3sS}
‘(He/she/it) ate the caribou meat.’

In contrast to the nominal system, there is no reflection of ergativity in the verbal inflection system in Inuktitut. Verbal inflections are obligatory, marking three grammatical functions together in one portmanteau suffix: verbal mood, person of both subject and object, and number of both subject and object. Every dialect of Inuktitut has several verbal moods. The Tarramiut dialect on which this chapter is based distinguishes a total of 10 verbal moods: indicative, participial (often used as indicative in this dialect), interrogative, imperative, contingent, conditional, dubitative, contemporative, incontemporative, and negative contemporative (Dorais 1988). It also has 4 persons – first, second, third coreferent, and third

---

3. Some verbal modalities are referred to with non-standard terminology in the literature on Inuit languages. Common meanings for each modality are as follows. Four modalities are used exclusively in main clauses. The indicative, interrogative, and imperative are self-explanatory. The participative is used in some Inuit languages to mark participles; in Inuktitut, it is used as a frequent alternative to the indicative. The remaining six modalities are used in subordinate clauses, or in apparently main clauses where the content of the actual main clause is understood. The contingent (also called perfective and causative) marks completed events in the past (e.g., *taku-gama* ‘when I saw’) and causal clauses (e.g., *taku-gama* ‘because I saw’). The conditional (also called imperfective) marks uncompleted events in the past or future (e.g., *taku-guma* ‘when I’ll see, if I see’). The dubitative marks uncertain events in the future (e.g., *taku-mmangaarma* ‘[I wonder] if I see’). The contemporative (also called perfective appositional) marks an event occurring at the same time as the event in the main clause (e.g., *taku-tsunga* ‘while seeing, I’.)
disjoint\(^4\) – and 3 numbers – singular, dual, and plural. The verbal inflection paradigm for the participial mood is shown in Table 3 (note that there are no 4th person forms for the participial mood because it cannot occur in subordinate clauses). Although the individual components of mood, person, and number were probably distinct historically, they can no longer be reliably identified throughout the system. In addition, there is quite a bit of syncretism in the paradigm.

As is evident in the table, verbs in transitive sentences are marked in one way while verbs in intransitives are marked in another. Because there is no identifiable marker for subject or object, it is not possible to tell whether S patterns with A or with O.

The final structural property of Inuktitut that we discuss relevant to ergativity is the possibilities for valency alternation available in the language. Bivalent propositions with two coreferents – typically Agent and Patient – are typically realized cross-linguistically as transitive structures. However, most languages also allow other structures to realize bivalent propositions, usually to facilitate manipulation of the discourse inference of the proposition. Inuktitut commonly uses three such structures to realize bivalent propositions: passive, noun incorporation, and antipassive. This means that thematically bivalent clauses have several possibilities of appearing syntactically as intransitive with corresponding intransitive case marking and verbal inflection, rather that appearing as standard transitives with

\[^4\] The coreferent inflection is used when the subject of the main and subordinate clause are the same. The disjoint inflection is used when the subject of the main and subordinate clause are different.

---

Table 3. Verbal inflection paradigm for participial mood

<table>
<thead>
<tr>
<th>Subject</th>
<th>None</th>
<th>1sO</th>
<th>1dO</th>
<th>1pO</th>
<th>2sO</th>
<th>2dO</th>
<th>2pO</th>
<th>3sO</th>
<th>3dO</th>
<th>3pO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1sS</td>
<td>-junga -</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-jagit -</td>
<td>-jattik -</td>
<td>-jatsi -</td>
<td>-jara -</td>
<td>-jaakka -</td>
<td>-jakka -</td>
</tr>
<tr>
<td>1dS</td>
<td>-juguk -</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-jattigut -</td>
<td>-jattik -</td>
<td>-jatsi -</td>
<td>-javuk -</td>
<td>-jaavuk -</td>
<td>-javuk -</td>
</tr>
<tr>
<td>1pS</td>
<td>-jugut -</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-jattigut -</td>
<td>-jattik -</td>
<td>-jatsi -</td>
<td>-javut -</td>
<td>-jaavut -</td>
<td>-javut -</td>
</tr>
<tr>
<td>2sS</td>
<td>-jutit -</td>
<td>-jarma -</td>
<td>-jattigut -</td>
<td>-jattigut -</td>
<td>-</td>
<td>-</td>
<td>-jait -</td>
<td>-jaakkik -</td>
<td>-jatit -</td>
<td></td>
</tr>
<tr>
<td>2dS</td>
<td>-jutik -</td>
<td>-jattinga -</td>
<td>-jattigut -</td>
<td>-jattigut -</td>
<td>-</td>
<td>-</td>
<td>-jatik -</td>
<td>-jaatik -</td>
<td>-jatik -</td>
<td></td>
</tr>
<tr>
<td>2pS</td>
<td>-jusi -</td>
<td>-jatsinga -</td>
<td>-jattigut -</td>
<td>-jattigut -</td>
<td>-</td>
<td>-</td>
<td>-jasi -</td>
<td>-jaasi -</td>
<td>-jasi -</td>
<td></td>
</tr>
<tr>
<td>3sS</td>
<td>-juq -</td>
<td>-jaanga -</td>
<td>-jaatiguk -</td>
<td>-jaatigut -</td>
<td>-jaatit -</td>
<td>-jatik -</td>
<td>-jaasi -</td>
<td>-janga -</td>
<td>-jaangik -</td>
<td>-jangit -</td>
</tr>
<tr>
<td>3dS</td>
<td>-juuk -</td>
<td>-jaanga -</td>
<td>-jaatiguk -</td>
<td>-jaatigut -</td>
<td>-jaatit -</td>
<td>-jatik -</td>
<td>-jaasi -</td>
<td>-jangak -</td>
<td>-jaangik -</td>
<td>-jangit -</td>
</tr>
<tr>
<td>3pS</td>
<td>-jut -</td>
<td>-jaanga -</td>
<td>-jaatiguk -</td>
<td>-jaatigut -</td>
<td>-jaatit -</td>
<td>-jatik -</td>
<td>-jaasi -</td>
<td>-jangat -</td>
<td>-jaangik -</td>
<td>-jangit -</td>
</tr>
</tbody>
</table>
ergative-absolutive case marking. (Note that there is no definitive literature on the discourse effects of these three structures. The assumption is that passive serves to defocus the Agent, noun incorporation is used when the object is indefinite or generic and is limited to a small set of verbs, and antipassive is used when the object is non-specific. However, these patterns vary by language/dialect, and there are several exceptions to the patterns even within languages/dialects.)

As shown in example (7), a passive clause expresses the Patient of the verb as the subject marked with absolutive case, while the Agent is expressed as an adjunct marked with allative case. Utterance (7a) shows a passive utterance containing the passive morpheme -jau- with both arguments omitted, (7b) contains an overt Agent, and (7c) contains an overt Patient.

(7) a. *Kiijautsararama.*
   
   kii-jau-tsaruaq-gama
   bite-pass-might-ctg.1sS
   ‘I might really get bitten.’
   (Elijah 2;0)

   b. *Itsununga aijagavit.*

   itsu-munga ai-jau-gavit
   that.one-all.sg get-pass-ctg.2sS
   ‘You will be brought by that one.’
   (Louisa 2;10)

   c. *Tigujaunngituq Pita?*

   tigu-jau-nngit-juq Pita-Ø
   take-pass-neg-par.3sS Peter-abs.sg
   ‘Peter won’t be taken away?’
   (Lizzie 3;3)

In noun incorporation constructions, the Agent is expressed as the subject of the verb marked with absolutive case. The Patient is incorporated into the verbal word, and so receives no case marking. The utterances in (8) show three different incorporating verbs: -qaq- ‘have’, -siuq- ‘look for’, and -liaq- ‘go to’. Example (8a) has an omitted subject, (8b) has a demonstrative subject, -una- ‘this one’, cliticized at the end of the verbal word, and (8c) has an independent lexical subject, ataata-ga ‘my father’.

(8) a. *Nasaqanngituq.*

   nasaq-qaq-nngit-juq
   hat-have-neg-par.3sS
   ‘He doesn’t have a hat.’
   (Louisa 3;6)

   b. *Uquuquisuriangajualuguna.*

   uquuqu-siuq-giaq-langa-juq=aluk=una
   animal-look.for-begin.to-fut-par.3sS=emph=hisone.abs.sg
   ‘This (person) is going to go look for an animal.’
   (Elijah 2;0)
c. *Ataataga kuapaliasijuq?*
   
   
   ataat-a-ga kuapaq-liaq-si-juq
\[\text{father-abs.1Ssg coop-go.to-prsp-par.3sS}\]
   
   ‘Is my father going to the co-op?’ (Louisa 3;2)

Finally, the antipassive construction expresses the Agent as the subject of the verb marked with absolutive case, and the Patient as an indirect object marked with modalis case, as in example (9). The antipassive morpheme can take a restricted number of forms: -i-, -ji-, -ni-, -si-, -tsaq-, -tsi- and -Ø-. Which form to use is at least partially determined by verb semantics and by the characteristics of the phoneme immediately preceding the antipassive morpheme. The utterances in (9b) and (9c) show the overt Patient marked with modalis case, but this is often omitted as in (9a).

(9) a. *Qaitsigit!*
   
   
   qai-tsi-git
\[\text{give-atp-imp.2sS}\]
   
   ‘Give me some!’ (wants a can of soda) (Louisa 3;2)

b. *Piarakkanik atjiliurama.*
   
   
   piaraq-kkanik atjiliuq-Ø-gama
\[\text{baby-mod.1Spl film-atp-ctg.1sS}\]
   
   ‘I took a picture of my babies.’ (referring to dolls) (Paul 3;3)

c. *Piganik aitsilaurlanga?*
   
   
   pi-ganik ai-tsi-lauq-langa
\[\text{thing-mod.1Ssg get-atp-pol-imp.1sS}\]
   
   ‘Shall I get my thing?’ (referring to her sunglasses) (Lizzie 3;3)

In a series of recent articles, Johns (2001, 2006) has claimed that Eskimo-Aleut languages are undergoing historical change with respect to ergativity. In particular, she provides evidence that the antipassive construction is gradually replacing the ergative-absolutive construction as the default syntactic realization of bivalent propositions in Eskimo languages in eastern Canada, such that they have the equivalent of nominative-accusative marking (here, absolutive for subject and modalis for object). For western Eskimo languages (i.e., spoken in Alaska and western Canada), however, she shows that the ergative-absolutive construction remains the default syntactic realization for bivalent propositions. Although Johns makes this claim about change broadly, she only provides supporting data from two Eskimo languages spoken in eastern Canada: Labrador Inuttut (spoken some 1000 km to the southeast of the Inuktutit-speaking region) and South Baffin (spoken across the Hudson Strait to the north of the Inuktutit-speaking region). It is not clear whether Johns’s claim extends to Inuktut and, if so, to what degree.
However, the possibility of language change is essential to keep in mind as we approach the analysis of the data in our study.

To summarize, ergativity in Inuktitut is visible only in case markers on nouns and demonstratives. It is not visible on pronouns because they do not appear in argument position, and it is obviously not visible on omitted arguments. Ergativity is not visible in verbal inflections. Therefore, only third person arguments can reflect ergativity. Further, there are three commonly used valency-alternating structures that permit bivalent propositions to be expressed as intransitives: passive, noun incorporation, and antipassive. Finally, it is possible that the default expression of bivalent propositions in Inuktitut is changing from an ergative to an accusative system.

Study 1: Ergativity in child spontaneous speech

With this background in mind, we now turn to investigating the acquisition of ergativity by Inuktitut-speaking children. Previous studies with children learning Inuktitut have shown early mastery of various aspects of morphosyntax including early and accurate use of passive and noun incorporation structures (Allen 1996; Allen & Crago 1996), causative structures (Allen 1998), and verbal inflection (Crago & Allen 1998, 2001). Thus, children may show similar early mastery of the ergative structure. However, it could also be that ergativity presents a more complex learning problem given the syntax-morphology discontinuity discussed earlier, and thus the children may take relatively more time to learn the ergative structure. We should also keep in mind that we may find little use of the ergative regardless, if Johns (2001, 2006) is correct that eastern Eskimo languages are experiencing a shift away from an ergative-accusative system.

Participants

The participants in this study were four Inuit children – Elijah, Lizzie, Louisa, and Paul – who lived in a small settlement of about 250 inhabitants in arctic Quebec (Allen 1996). They were all the children in the community at that time (early 1989) who were between the ages of 2;0 and 3;0, typically developing in language, typically developing in other relevant ways (e.g., no hearing loss, no neurological concerns, no physical concerns), and whose families were willing to participate in the study.

All four children were monolingual learners of Inuktitut. Three of them (Lizzie, Louisa, Paul) lived in nuclear families with two parents and one or more siblings. All six parents were in their 20s and 30s, all spoke English at least conversationally (a couple spoke French as well), and all worked outside the home in jobs.
such as teaching, policing, and construction. The fourth child (Elijah) lived in an extended family with his grandparents who had officially adopted him, and with their children including his birth mother. His adoptive parents were in their 40s and spoke very little English or French. His adoptive mother had a part-time position outside the home in community service, and his adoptive father supported the family through hunting and fishing. Elijah’s aunts, uncles, and birthmother all spoke English to varying degrees and all worked or studied outside the home. Across all four target children, virtually all interaction between the child and his/her family members took place in Inuktitut.

Data collection and preparation

All of the children were videotaped in naturalistic communication situations in their homes. They were between 2;0 and 2;10 at the start of the study. A total of four hours of videotape was taken over a one-week period, once per month for nine months. All taping was conducted by the author. During these sessions, the children typically played with friends and family members, ate meals, and engaged in other every-day activities.

About half the data from each month was selected for transcription based on audio quality of the tape, talkativeness of the child, and typicality of the interaction. Data were transcribed by native speakers of Inuktitut following CHAT format (MacWhinney 2000). The first, middle, and last months of tape (months 1, 5, and 9) were selected for intensive analysis. This comprises an average of 6 hours per child, for a total of 21 hours of data altogether.

Since this study focuses on the acquisition of ergativity, we were interested only in original and productive utterances containing a verb. Therefore, we excluded from the data all incomplete utterances, all non-original utterances (e.g., song lyrics, memorized stories), and all utterances that did not contain a verb. A total of 2588 clauses remained, including 1971 intransitive and 617 transitive clauses. A summary of data analyzed is in Table 4.

Data coding

Data coding focused on three aspects of clause structure: arguments (subject and object), verbal inflections, and clause valence.

All subjects and objects were coded for person, number, and case as marked on obligatory nominal inflections. Person included first, second, and third (no distinction was made between third coreferent and third disjoint). Number included singular, dual, and plural. Case was only coded for arguments realized as either lexical nouns or demonstratives. It included ergative, absolutive, and modalis.
Table 4. *Data analyzed* (adapted from Allen & Schröder, 2003, p. 310)

<table>
<thead>
<tr>
<th>Child</th>
<th>Age</th>
<th>No. intransitive clauses</th>
<th>No. transitive clauses</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elijah</td>
<td>2;0</td>
<td>173</td>
<td>41</td>
<td>214</td>
</tr>
<tr>
<td></td>
<td>2;5</td>
<td>223</td>
<td>89</td>
<td>312</td>
</tr>
<tr>
<td></td>
<td>2;9</td>
<td>254</td>
<td>42</td>
<td>296</td>
</tr>
<tr>
<td>Lizzie</td>
<td>2;6</td>
<td>56</td>
<td>40</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td>2;10</td>
<td>243</td>
<td>79</td>
<td>322</td>
</tr>
<tr>
<td></td>
<td>3;3</td>
<td>107</td>
<td>20</td>
<td>127</td>
</tr>
<tr>
<td>Louisa</td>
<td>2;10</td>
<td>78</td>
<td>33</td>
<td>111</td>
</tr>
<tr>
<td></td>
<td>3;2</td>
<td>262</td>
<td>118</td>
<td>380</td>
</tr>
<tr>
<td></td>
<td>3;6</td>
<td>235</td>
<td>65</td>
<td>300</td>
</tr>
<tr>
<td>Paul</td>
<td>2;6</td>
<td>87</td>
<td>22</td>
<td>109</td>
</tr>
<tr>
<td></td>
<td>2;11</td>
<td>61</td>
<td>29</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>3;3</td>
<td>192</td>
<td>39</td>
<td>231</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>1971</td>
<td>617</td>
<td>2588</td>
</tr>
</tbody>
</table>

All verbal inflections were first determined to be intransitive or transitive. This is obvious from the form of the inflection as indicated in Table 3. Then all verbal inflections were coded for the mood, person and number of subject and object (where relevant) as indicated in the obligatory verbal inflections. Mood included the ten verbal moods listed earlier: indicative, participial, interrogative, imperative, contingent, conditional, dubitative, contemporative, incontemporative, and negative contemporative. Person included first, second, third coreferent, and third disjoint. Number included singular, dual, and plural.

Finally, all intransitive verbs were coded for presence of valency alternating structures. Passives were coded for person and form of both Agent and Patient. Noun incorporation structures were coded for person and form of Agent; all Patients are by definition third person lexical. Finally, antipassives were coded for person and form of both Agent and Patient, as well as presence or absence of an overt antipassive morpheme.

**Results and discussion**

Recall that ergativity in Inuktitut is only visible in nominal case marking, not in verbal inflection or other affixes. Further, only third person subjects and objects are realized as either demonstratives or nouns where case marking would be visible. First and second person subjects and objects are expressed only in verbal inflection, not as independent pronouns. Therefore, we began the analysis by
determining how many obligatory contexts for production of ergative case marking were present in the child data.

We found that only 16 of the 617 transitive subjects in the data were third person; the remaining ones were either first (n = 328) or second (n = 273) person as exemplified in (10a) and (10b) respectively. This is not surprising because transitive subjects tend to realize given referents that are highly accessible in the discourse (Du Bois 1987; Allen, Skarabela & Hughes 2008). First and second person subjects are highly accessible by definition, and thus often appear as transitive subjects.

(10) a. *Una aturtara.*

\[\text{u-na atuq-jara}\]
\[\text{this.one-abs.sg use-par.1sS.3sO}\]
\[\text{‘I’m using this one.’}\] (Elijah 2;5)

b. *Ijukkatilauruk.*

\[\text{ijukkaq-tit-lauq-guk}\]
\[\text{fall-caus-pol-imp.2sS.3sO}\]
\[\text{‘Make it fall.’}\] (Louisa 3;2)

Of those 16 third person transitive subjects, we found that only seven were overt (all lexical NPs), as shown in (11). All of the others were omitted as shown in (12), and thus are not obligatory contexts for ergative marking. Of the seven overt transitive subjects, all were correctly marked with ergative case.

(11) a. *Anaanangata Jaaniup aarqiratakainnatanga niinigannguara.*

\[\text{anaana-ngata Jaani-up aarqik-rataaq-kainnaq-janga}\]
\[\text{mother-erg.3Ssg Johnny-erg.sg fix-just-past-par.3sS.3sO}\]
\[\text{niinigaq-nnguaq-ga}\]
\[\text{organ-toy-abs.1Ssg}\]
\[\text{‘Johnny’s mother just fixed my toy organ.’}\] (Elijah 2;9)

b. *Ataatamma kaivaluakainnatanga.*

\[\text{ataata-mma kaivalua-kainnaq-janga}\]
\[\text{father-erg.1Ssg turn-past-par.3sS.3sO}\]
\[\text{‘My father spun it.’}\] (Elijah 2;9)

(12) a. *Sauniapirlaalu aipparikainnatanga.*

\[\text{sauniq-Ø=apik=aluk aippaq-gi-kainnaq-janga}\]
\[\text{namesake-abs.sg=dim=emph companion-have.as-past-par.3sS.3sO}\]
\[\text{‘His big namesake was with him.’}\] (Elijah 2;9)
\[\text{[lit. ‘He had his big namesake as a companion.’]}\]
b. *Qaakainnatanga.*

\[ qaaq-ka\text{-}nnaq\text{-}janga \]
\[ \text{burst-past-par.3sS.3sO} \]

‘He burst it.’  
(Paul 3;3)

Interestingly, all seven instances of use of an overt ergative subject in the child data are from only one child, Elijah. He is the most linguistically advanced of the four children as determined by verbal MLU and his more advanced acquisition of passive and noun incorporation structures (Allen 1996). This may be purely coincidental. It may be, however, that one requires some threshold level of language ability to produce third person transitive subjects in ergative constructions. At any rate, when Elijah encountered an obligatory context for the use of ergative case marking, he consistently used it correctly. Further, we found no overgeneralizations of ergative case marking to absolutive contexts, or vice versa, in any of the four children. (Note that there were 48 third person subjects of antipassive clauses in the data, of which 14 were realized by overt demonstratives or lexical NPs marked with absolutive case. These 14 subjects constitute the potential contexts for overgeneralization.) This lack of overgeneralization is consistent with findings for other ergative languages; Van Valin (1992: 35) states in his overview of ergative acquisition that “such overgeneralizations are extremely rare in the studies of the acquisition of ergative languages.”

What is most surprising about these data, then, is that there are not more transitive clauses with third person subjects. Is it that third person subjects are never expressed in bivalent propositions in Inuktitut child speech, or are they expressed in some other structure? Does John’s (2001, 2006) claim indeed extend to Inuktitut – that the antipassive is replacing the ergative-absolutive structure as the default structure to express bivalent propositions?

**Alternatives options for expressing bivalent propositions**

To further explore this question of how bivalent propositions are expressed by the children, we searched the data to determine the range of use of the different options enumerated earlier. We found a widespread use of valency alternating structures from the youngest ages. Of the 1971 intransitive clauses, 81 were passive structures, 151 were antipassive structures, and 169 were noun incorporation structures, as shown in Table 5. Thus, a total of 401 (21%) of the seemingly intransitive clauses in fact were bivalent propositions, having both a thematic Agent and a thematic Patient. The Agent was third person in 199 (50%) of the 401 intransitive but bivalent clauses, and 48 (24%) of those 199 third person Agents were overt.
Table 5. Number of bivalent propositions across four syntactic structures, in data from four Inuit children

<table>
<thead>
<tr>
<th></th>
<th>Transitive</th>
<th>Antipassive</th>
<th>Passive</th>
<th>Noun Incorporation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total – N (prop(^a))</td>
<td>617 (.60)</td>
<td>151 (.15)</td>
<td>81 (.08)</td>
<td>169 (.17)</td>
</tr>
<tr>
<td>Third Person – N (prop(^b))</td>
<td>16 (.03)</td>
<td>48 (.32)</td>
<td>79 (.98)</td>
<td>72 (.43)</td>
</tr>
<tr>
<td>Overt – N (prop(^c))</td>
<td>7 (.44)</td>
<td>18 (.38)</td>
<td>13 (.16)</td>
<td>17 (.24)</td>
</tr>
</tbody>
</table>

\(^a\) Proportion of total bivalent propositions that are of each type of structure
\(^b\) Proportion of total number of given type of structure that have third person subjects
\(^c\) Proportion of third person subjects that are overt

The most important finding emerging from these data is that Inuit children typically do not use structurally transitive clauses to express bivalent propositions with third person Agents, but rather use valency alternating structures. In fact, of the 215 bivalent propositions with third person Agents used by the children, only 7% were expressed with the standard transitive structure.

In addition, ellipsis of third person Agents is common in Inuktitut. A total of 160 (74%) of the 215 third person Agents in bivalent propositions were not expressed overtly. Between these two trends — little use of transitive structures and high subject ellipsis — not many opportunities are present for Inuit children to show their knowledge of ergative morphology. However, where the opportunity arose, the one child in our data who used the ergative did so correctly.

To summarize, we have found that the four monolingual learners of Inuktitut in Study 1 use the ergative structure rarely, although the one child who does use it does so correctly. We have also found that the children prefer to use other structures to realize bivalent propositions. These structures are antipassive, passive, and noun incorporation, all of which have a thematic Agent and Patient but are expressed formally as intransitives.

There are at least two possible reasons for this pattern in the data. First, it could be that only the most linguistically advanced child in our study really knew how to use the ergative correctly. Under this hypothesis, the other children (and also Elijah some of the time) are using alternative syntactic structures to express bivalent propositions in order to avoid using the transitive structure which would require use of ergative morphology. And when they must use a transitive structure, they elide the third person subject to again avoid ergative morphology. That would predict that older children and adults, who have presumably already mastered ergative morphology, would use many more instances of transitive utterances with overt third person subjects correctly marked with ergative case.
A second possibility is that these characteristics are typical of Inuktitut in general, and that the children are just reflecting the language around them. Thus, there is nothing particularly child-like about the predominant use of structures other than the transitive to express bivalent propositions, and it does not reflect avoidance of a non-mastered structure. This scenario would be consistent with Johns’s (2001, 2006) claim that the ergative-absolutive transitive structure is losing its place as the default for expressing bivalent propositions in Inuktitut. In addition, it would predict that speakers of all ages rarely use transitive utterances with third person subjects, and rarely use ergative case.

To tease apart these two possible reasons for a lack of obligatory contexts for use of ergative morphology in the child data, we looked at ergative marking in two further sets of data in Inuktitut. Study 2 investigated caregiver speech from the parents of the four children in Study 1, while Study 3 explored ergative use in spoken elicited narratives from 9-year-old, 15-year-old and adult speakers of Inuktitut. Both of these studies explored whether older speakers of the same dialect of Inuktitut, in two different discourse contexts, followed the same patterns as the children in Study 1.

Study 2: Ergativity in caregiver spontaneous speech

In Study 1, we found that the four Inuit children aged 2;0–3;6 largely failed to use transitive structures with third person subjects, using alternative structures (antipassive, passive, noun incorporation) instead. Although the children produced a total of 215 bivalent propositions with third person Agents, only 16 of these were expressed with transitive structures and thus were potential contexts for ergative morphology. Overt subjects with ergative morphology were produced in only 7 contexts, all by one child. To determine whether this lack of use of transitive structures and thus of ergative morphology is a developmental stage or a (changing) feature of Inuktitut, we conduct here the same analysis as in Study 1 with the parents of the target children.

Participants

Participants in this study were the mother and father of each of the target children in Study 1. The parents of the children did not participate in every taping session enumerated in Study 1. Inuit adults typically serve as caregivers rather than play partners for their children, and therefore many taping sessions consisted of children playing with their peers rather than interacting with their parents. Nonetheless,
enough data was available from each parent to facilitate a study of the use of ergative marking.

**Data collection, preparation, and coding**

Data collection, preparation, and coding was identical to that in Study 1.

**Results and discussion**

Available for analysis were 655 intransitive clauses and 133 transitive clauses, taking data from all eight parents together.

As in Study 1, we first determined the number of obligatory contexts for ergative use – all transitive clauses with third person subjects. Like results from the child spontaneous speech data, few transitive utterances with third person subjects were evidenced. Of the 134 transitive clauses in the data set, only two had third person subjects, given in (13). However, neither of the subjects was expressed overtly.

(13)

a. *Pusigarniriaqtauangauna aupurtulirtuq.*
   
   pusigaq-niq-gi-qqau-janga=u-na
   bump.head-GERUND-have.as-PAST-PAR.3s$3O=thisthree-one-ABS.SG
   aupaq-juq-u-liq-juq
   be.red-NOM-COP-INC-PAR.3s$
   ‘The one who bumped his head is getting red.’  (Elijah's father)
   [LIT: ‘He, who had this as a head-bumping, is getting red.’]

b. *Umiujaqmiuq aipparilangalaujujanga.*
   
   Umiujaq-miuq-Ø
   Umiujaq-resident.of-ABS.SG
   aippaq-gi-langa-lauju-janga
   companion-have.as-FUT-PAST-PAR.3s$3S3O
   ‘The one from Umiujaq was going to come along with her.’
   (Paul’s mother)
   [LIT: ‘She was going to have the one from Umiujaq as a companion.’]

We then searched the data to find out how thematically bivalent propositions were expressed if not as transitives. As with the child spontaneous speech data, we found frequent use of valency alternating structures in the caregiver data as detailed in Table 6. Twenty-four percent of the 655 structurally intransitive clauses in fact had both a thematic Agent and a thematic Patient. Of these clauses, 29% had a third person subject (compared to 1% of transitive clauses), and 27% of those were expressed overtly (compared to 0% in transitive clauses).
Table 6. Number of bivalent propositions across four syntactic structures, in data from eight Inuit caregivers

<table>
<thead>
<tr>
<th></th>
<th>Transitive</th>
<th>Antipassive</th>
<th>Passive</th>
<th>Noun Incorporation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total – N (propa)</td>
<td>133 (.46)</td>
<td>51 (.18)</td>
<td>20 (.07)</td>
<td>83 (.29)</td>
</tr>
<tr>
<td>Third Person – N (propb)</td>
<td>2 (.01)</td>
<td>6 (.12)</td>
<td>15 (.75)</td>
<td>23 (.28)</td>
</tr>
<tr>
<td>Overt – N (propc)</td>
<td>0 (.00)</td>
<td>2 (.33)</td>
<td>5 (.33)</td>
<td>5 (.22)</td>
</tr>
</tbody>
</table>

a Proportion of total bivalent propositions that are of each type of structure
b Proportion of total number of given type of structure that have third person subjects
c Proportion of third person subjects that are overt

The results for our analysis of Inuktitut caregiver speech show very similar results to those from the child spontaneous speech data. In particular, transitive utterances with third person subjects are exceedingly infrequent. In contrast, structurally intransitive but thematically bivalent utterances with third person Agents are much more frequent, including antipassive utterances.

This finding supports the second hypothesis mentioned at the end of Study 1: that Inuktitut is undergoing a process of language change away from transitive structures with ergative-absolutive morphology as the default structure to express bivalent propositions. Although it does not constitute evidence against the first hypothesis that children might be avoiding transitive utterances due to lack of knowledge of how to express ergative case marking, it calls that hypothesis into question. In Study 3, we test the two hypotheses further with elicited narrative data.

Study 3: Ergativity in elicited narratives

In Study 3, we investigated the use of ergative marking in elicited narratives from participants aged 9, 15 and adult to further determine whether the lack of ergative use and predominance of valency alternating structures found in child and caregiver spontaneous speech is a result of early lack of competence with the ergative or the result of possible language change. Elicited narratives are a particularly good source of data to answer this question because virtually all arguments are third person. The three age groups allow us to see development in the use of ergative morphology with age, and also as an effect of amount of instruction in a language with nominative-accusative structure (i.e., English or French).

The narratives investigated here were collected in May 1996 as part of a larger study on first and second language competence among Inuit in northern Quebec (Allen, Crago & Pesco 2006). This particular community had about 1100 inhabitants.
including about 20% native speakers of English or French and 80% native speakers of Inuktitut. English and French are used frequently in daily social and business interactions; Inuktitut is also used frequently in these contexts as well as being the default language in all other contexts.

**Participants**

Participants were all native speakers of Inuktitut. They included several adults in the community, as well as all students in grade 3 (age 8–9) and grades 8 and 9 (a combined class, ages 15–16) who were from Inuktitut-speaking homes and had been educated solely in Inuktitut through the end of grade 2. All children in the selected grades participated in this study as part of a larger study on language skills in this community. Grade 3 is the first year in school in which instruction mandatorily takes place in a majority language (English or French) rather than in Inuktitut, and children in grades 8 and 9 have had 5 to 6 years of schooling in a majority language. The adults were chosen at the discretion of the Inuit research assistants, and were known to be strong speakers of Inuktitut although most were also bilingual to varying degrees in English and/or French.

We divided the participants into three groups based on age, and then randomly selected three participants from each of the groups for detailed study. Table 7 gives the code name, age, and gender of each of the selected participants.

**Table 7. Participants in elicited narrative study**

<table>
<thead>
<tr>
<th>Group</th>
<th>Name</th>
<th>Agea</th>
<th>Genderb</th>
<th>Schoolingc</th>
<th>No. Intr.</th>
<th>No. Tr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 3</td>
<td>LS</td>
<td>9;0</td>
<td>F</td>
<td>French</td>
<td>37</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>LT</td>
<td>9;1</td>
<td>F</td>
<td>English</td>
<td>30</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>SJ</td>
<td>9;4</td>
<td>F</td>
<td>French</td>
<td>37</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>104</td>
<td>0</td>
</tr>
<tr>
<td>Grade 8</td>
<td>AS</td>
<td>15;3</td>
<td>F</td>
<td>English</td>
<td>37</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>CA</td>
<td>15;7</td>
<td>M</td>
<td>French</td>
<td>46</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>JM</td>
<td>16;4</td>
<td>F</td>
<td>French</td>
<td>41</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>124</td>
<td>0</td>
</tr>
<tr>
<td>Adult</td>
<td>BK</td>
<td>40s</td>
<td>F</td>
<td>none</td>
<td>80</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>ET</td>
<td>40s</td>
<td>F</td>
<td>none</td>
<td>89</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>LM</td>
<td>40s</td>
<td>F</td>
<td>none</td>
<td>86</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>255</td>
<td>3</td>
</tr>
</tbody>
</table>

*a Age is represented by years;months.

b F = female; M = male.

c Language of instruction in school after grade 2
Data collection

Data were collected by asking each participant to narrate a 24-page wordless picture book entitled *Frog, Where are You?* (Mayer 1969). Narratives were elicited on an individual basis by Inuk research assistants. Each participant was tested separately in a quiet room at their school (grades 3 and 8/9) or at home (adults). The participant first looked through the book to familiarize him/herself with the story, and then told the story to the research assistant while still looking at the book. All sessions were audiotaped for later transcription and analysis.

This book has been widely used in studies of narrative development in many different languages and cultures (Berman & Slobin 1994; Strömqvist & Verhoeven 2004). It is a story about a boy who has a pet dog and a pet frog. At the beginning of the story the frog escapes from his jar. The boy and his dog spend most of the story looking for the frog, first indoors and then outdoors in the woods. They finally find the frog with his/her spouse and children, and bring one of the baby frogs home as a new pet. The story and the task were considered culturally appropriate for the Inuit participants as discussed in Allen et al (2006), and have been used successfully in one study with Inuit speakers of West Greenlandic (Engberg-Pedersen & Trondhjem 2004).

Data coding

Each of the 18 narratives was transcribed by a native speaker of Inuktitut. Each word in the transcript was then divided into morphemes by a research assistant, and checked for accuracy by the author. Appendix 1 provides a complete narrative from one of the grade 3 participants.

As in Studies 1 and 2, data coding focused on three aspects of clause structure: arguments (subject and object), verbal inflections, and clause valence. All subjects and objects were coded for case and number as marked on obligatory nominal inflections. All verbal inflections were identified as intransitive or transitive, which is evident from the inflectional form. Then inflections were coded for the mood, person and number of subject and object (where relevant) as indicated in the obligatory verbal inflections. Finally, all intransitive verbs were coded for presence of valency alternating structures.

Results and discussion

A total of 489 intransitive and 3 transitive clauses were available for analysis. As in Studies 1 and 2, we first determined the number of obligatory contexts for ergative
use – all transitive clauses with third person subjects. Of the three transitive clauses in the data set – all in data from the adult participants – only two have third person subjects. One of these has a lexical subject (14a), and one a null subject (14b). The lexical subject is third person dual, so takes the same inflection in both ergative and absolutive case. These data fit the pattern established so far with the child and caregiver spontaneous speech data: third person subjects are rarely found in transitive structures.

(14) a. **Taamikku takulirtangi.**
    Taami-kkut-uk  
    taku-lir-jangit  
    ‘Tommy and his companion (dog) found them.’
    (BK, adult)

b. **Sunauvva akiruujurijanga tuttualuu najjungi.**
    suna=uvva akiruq-u-juri-janga tuttu-aluk-up  
    what=look branch-cop-think-par.3sS.3sO caribou-EMPH-ERG.SG  
    natjuk-ngit  
    antler-abs.3Xpl  
    ‘What he thought was a branch turned out to be a caribou’s antler.’
    (LM, adult)

We then searched the data to find out how thematically bivalent propositions were expressed if not as transitives. As with the spontaneous speech data in Studies 1 and 2, we found a widespread use of valency alternating structures in the narratives at all three ages as detailed in Table 8. Of the 110 intransitive clauses for the children in grade 3, 57% were bivalent. Of 124 for grade 8, 56% were bivalent. And of 255 for adults, 49% were bivalent. The same general pattern held across all age groups.

Two observations arise from these data. First, Inuktitut speakers aged 9, 16, and adult typically do not use structurally transitive clauses to express bivalent propositions with third person Agents in narratives, but rather use valency alternating structures. Of the 260 bivalent propositions in the data, 257 (99%) were expressed with structurally intransitive clauses. This pattern mirrors that in spontaneous speech. The overwhelming pattern, then, is that transitive structures are rarely used when third person subjects are involved, and are mostly used for first and second person subjects. Second, ellipsis of third person Agents is not as common in narratives as in spontaneous speech. A total of 74% of third person Agents were omitted in child spontaneous speech and 73% in adult caregiver spontaneous speech. In contrast, only 29% of third person Agents were omitted in the grade 3 narratives, 31% in the grade 8 narratives, and 56% in the adult narratives.
Table 8. Number of bivalent propositions across four syntactic structures, in data from Inuit narratives at three ages

<table>
<thead>
<tr>
<th></th>
<th>Transitive</th>
<th>Antipassive</th>
<th>Passive</th>
<th>Noun Incorporation</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRADE 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total – N (prop(^a))</td>
<td>0 (.00)</td>
<td>47 (.75)</td>
<td>15 (.24)</td>
<td>1 (.01)</td>
</tr>
<tr>
<td>Third Person – N (prop(^b))</td>
<td>0 (.00)</td>
<td>47 (1.00)</td>
<td>15 (1.00)</td>
<td>1 (1.00)</td>
</tr>
<tr>
<td>Overt – N (prop(^c))</td>
<td>0 (.00)</td>
<td>35 (.74)</td>
<td>9 (.60)</td>
<td>1 (1.00)</td>
</tr>
<tr>
<td>GRADE 8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total – N (prop(^a))</td>
<td>0 (.00)</td>
<td>49 (.70)</td>
<td>12 (.17)</td>
<td>9 (.13)</td>
</tr>
<tr>
<td>Third Person – N (prop(^b))</td>
<td>0 (.00)</td>
<td>49 (1.00)</td>
<td>12 (1.00)</td>
<td>9 (1.00)</td>
</tr>
<tr>
<td>Overt – N (prop(^c))</td>
<td>0 (.00)</td>
<td>34 (.69)</td>
<td>9 (.75)</td>
<td>5 (.56)</td>
</tr>
<tr>
<td>ADULT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total – N (prop(^a))</td>
<td>3 (.02)</td>
<td>84 (.66)</td>
<td>15 (.12)</td>
<td>25 (.20)</td>
</tr>
<tr>
<td>Third Person – N (prop(^b))</td>
<td>2 (.67)</td>
<td>84 (1.00)</td>
<td>15 (1.00)</td>
<td>25 (1.00)</td>
</tr>
<tr>
<td>Overt – N (prop(^c))</td>
<td>1 (.50)</td>
<td>42 (.50)</td>
<td>9 (.60)</td>
<td>4 (.16)</td>
</tr>
</tbody>
</table>

\(^a\) Proportion of total bivalent propositions that are of each type of structure
\(^b\) Proportion of total number of given type of structure that have third person subjects
\(^c\) Proportion of third person subjects that are overt

Comparison across three data types

We ended Study 1 with two hypotheses about why there were so few obligatory contexts for use of ergative morphology in data from the two-year-old children. The first was that the children had difficulty with ergative morphology, and thus used alternative syntactic structures to express bivalent propositions in order to avoid using the transitive structure which would require use of ergative morphology. According to this hypothesis, older children and adults, who have presumably already mastered ergative morphology, would use many more instances of transitive utterances with overt third person subjects correctly marked with ergative case. The second hypothesis was that use of alternative syntactic structures to express bivalent propositions is typical of Inuktitut in general, a scenario consistent with Johns’s (2001, 2006) claim that the ergative-absolutive transitive structure is losing its place as the default for expressing bivalent propositions in Inuktitut. According to this hypothesis, speakers of all ages would rarely use transitive utterances with third person subjects, and rarely use ergative case.

We are now in a position to answer this question. In Tables 9 and 10, we show information from each of the groups about how frequently each of the possible structures is used to realize bivalent propositions – Table 9 for first and second person Agents, and Table 10 for third person Agents.
Table 9. Frequency of use of four syntactic structures to express bivalent propositions for clauses with first and second person Agents – n (proportion of total)

<table>
<thead>
<tr>
<th></th>
<th>Transitive</th>
<th>Antipassive</th>
<th>Passive</th>
<th>Noun Incorporation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Spontaneous Speech</td>
<td>601 (.75)</td>
<td>103 (.13)</td>
<td>2 (.00)</td>
<td>97 (.12)</td>
</tr>
<tr>
<td>Caregiver Spontaneous Speech</td>
<td>131 (.54)</td>
<td>45 (.19)</td>
<td>5 (.02)</td>
<td>60 (.25)</td>
</tr>
<tr>
<td>Grade 3 Narrative</td>
<td>0 (.00)</td>
<td>0 (.00)</td>
<td>0 (.00)</td>
<td>0 (.00)</td>
</tr>
<tr>
<td>Grade 8 Narrative</td>
<td>0 (.00)</td>
<td>0 (.00)</td>
<td>0 (.00)</td>
<td>0 (.00)</td>
</tr>
<tr>
<td>Adult Narrative</td>
<td>1 (1.00)</td>
<td>0 (.00)</td>
<td>0 (.00)</td>
<td>0 (.00)</td>
</tr>
</tbody>
</table>

Table 10. Frequency of use of four syntactic structures to express bivalent propositions for clauses with third person Agents only – n (proportion of total)

<table>
<thead>
<tr>
<th></th>
<th>Transitive</th>
<th>Antipassive</th>
<th>Passive</th>
<th>Noun Incorporation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Spontaneous Speech</td>
<td>16 (.07)</td>
<td>48 (.22)</td>
<td>79 (.37)</td>
<td>72 (.34)</td>
</tr>
<tr>
<td>Caregiver Spontaneous Speech</td>
<td>2 (.04)</td>
<td>6 (.13)</td>
<td>15 (.33)</td>
<td>23 (.50)</td>
</tr>
<tr>
<td>Grade 3 Narrative</td>
<td>0 (.00)</td>
<td>47 (.75)</td>
<td>15 (.24)</td>
<td>1 (.01)</td>
</tr>
<tr>
<td>Grade 8 Narrative</td>
<td>0 (.00)</td>
<td>49 (.70)</td>
<td>12 (.17)</td>
<td>9 (.13)</td>
</tr>
<tr>
<td>Adult Narrative</td>
<td>2 (.02)</td>
<td>84 (.66)</td>
<td>15 (.12)</td>
<td>25 (.20)</td>
</tr>
</tbody>
</table>

Comparing the two tables, we see that the transitive structure is commonly used in spontaneous speech by both children and adults when the Agent is first or second person; unfortunately only one narrative utterance had a first or second person Agent so we cannot compare across the genre types. However, when the Agent is third person, transitive structures are highly dispreferred in both spontaneous speech and narrative data, at all ages considered. In narrative data, the antipassive structure is the alternative of choice to express bivalent propositions. In spontaneous speech data, passive and noun incorporation structures are used more or less equally, and antipassive structures are used somewhat less frequently.

Overall, these tables show that the rarity of transitive structures with third person subjects is typical of Inuktitut in general, and not simply restricted to young children's spontaneous speech.
Study 4: Ergativity in West Greenlandic child spontaneous speech

In the final section of this chapter, we investigate ergative use in five children aged 2;2–5;2 learning West Greenlandic, based on data reported in Fortescue and Lennert Olsen (1992). West Greenlandic is spoken by some 60,000 inhabitants of the western part of Greenland, a very large island located to the east of Canada. This investigation will further our understanding of ergative acquisition in two ways. The first is to determine how children learning another Inuit language use ergative morphology, and whether the patterns are similar. The second is to see whether speakers of an Inuit language at the easternmost point of the Inuit language continuum express bivalent propositions predominantly with transitive or antipassive structures. This will shed light on the extent of Johns's (2001, 2006) findings that the antipassive is overtaking the transitive structure as the default expression of bivalent propositions in eastern Inuit languages. Although our investigation is necessarily limited by the data available, it will nevertheless provide some information relevant to both of these questions.

Fortescue and Lennert Olsen (1992) report on the acquisition of West Greenlandic in five children aged 2;2, 3;1, 3;4, 4;7, and 5;2. Their data were collected in naturalistic communication situations in the homes of the children living in Greenland. Although their chapter does not provide the full set of data from each child, it provides extensive lists and examples of constructions used including nominal inflections. Thus, although ergativity is not the focus of their analysis, we can nonetheless obtain a reasonable sense of the pattern of the acquisition of ergativity through the material in their chapter.

The typological features of West Greenlandic are very similar to those of Inuktitut. The two languages differ in that West Greenlandic allows pronouns for first and second person in both subject and object position. Unfortunately, however, the forms of the pronouns are the same for ergative and absolutive, so they do not help us distinguish whether children know the ergative system. Like in Inuktitut, ergative and absolutive case are distinguished for the third person demonstrative forms as well as for the singular form of the inflection on third person lexical nouns. In addition, the ergative and possessive forms are identical.

At age 2;2, no use of ergative inflections is reported. The child uses mostly one- and two-morpheme utterances so there is little possibility for ergative marking. All of the utterances are either intransitive or imperative, and none of the intransitive utterances employ valency alternating structures.

Seventeen transitive utterances with twelve different transitive verbal inflections are reported for the child studied at age 3;1. These include three uses of ergative marking. One instance involves unambiguous ergative marking on a third person lexical noun (15c); the other two instances involve first person pronouns
where the form is the same for ergative and absolutive. This child also
produces one error relating to the ergative: s/he produces one antipassive utter-
ance that has an absolutive-marked object (as it would if the structure were erga-
tive-absolutive) rather than a modalis-marked object (as would be appropriate for
the antipassive). S/he also uses some valency alternating structures.

(15) a. *uanga aataa-kkun-ni angisooq-Ø*
    1sS.ERG/ABS grandpa-and.companions-LOC.PL big.one-ABS.SG
    *tie.up-INC-P-CTG.1sS.3sO*
    'At grandpa’s place when I tied the big one (= dog) up.'  (p. 152)

b. *aaaju uanga neri-vara*
    big.brother 1sS.ERG/ABS eat-IND.1sS.3sO
    'Big brother, I’m eating it.'  (p. 152)

c. *ataata-p igik-kaminga sila-mi*
    father-ERG.SG throw-CTG.4sS.1sO outside-LOC.SG
    'Daddy threw me outside.'  (p. 155)

At age 3;4, nineteen uses of transitive utterances are reported including ten differ-
ent transitive verbal inflections. (More transitive utterances were likely produced
during the recording session but not reported.) The child uses three ergative sub-
jects including one third person demonstrative (16a) and one third person lexical
noun (16b). One error occurs where ergative case should be marked but is not.
Valency alternating structures are prevalent.

(16) a. *kuserfigi-ssa-vaa uuma una*
    drip.on-FUT-IND.3sS.3sO this.ERG this.ABS
    'This will drip on this.'  (p. 166)

b. *saa aalisakka-p kii-ssa-gamigit*
    yes fish-ERG.SG bite-FUT-CTG.4sS.3pO
    'Yes, because the fish will bite them.'  (p. 171)

The frequent use of transitive utterances continues at 4;7 with 29 transitive utter-
ances and 17 different transitive verbal inflections reported (and certainly many
more produced during the recording session but not reported). Five uses of an
ergative subject are documented – two with unambiguously marked third per-
son lexical subjects (17b) and with first person pronouns which take the same
form for ergative and absolutive (17a). Like at 3;4, one error occurs where erga-
tive case should be marked but is not. Valency alternating structures are again
prevalent.
The acquisition of ergativity in Inuktitut

(17) a. uanga rusarnaa-rusup-para
   1s.S.ERG/ABS listen.to-want-ind.1s.S.3sO
   ‘I’d like to listen to it.’

b. killor-mut meera-p saat-ta-ramigit
   wrong.way-all.sg child-erg.sg turn-hab-ctg.4s.S.3sO
   ‘The child turns them the wrong way.’

Finally, the child at 5;2 uses numerous transitive utterances: 15 transitive utterances and 14 different transitive verbal inflections are reported (and many more are used but not reported). Only one use of an ergative subject is evidenced in the reported utterances: a third-person lexical form (18). In addition, one error occurs where ergative case should be marked but is not. Valency alternating structures are again prevalent.

(18) ... Hans Frederik-u(p) ajal-lunga ...
   ... Hans Frederik-erg.sg push-ctp.4s.S.1sO
   ‘...Hans Frederik pushed me ...’

In conclusion, we see that numerous transitive utterances are produced by these five West Greenlandic-speaking children. Ergative-marked subjects are used sparingly, and in three forms: first person singular (same form for ergative and absolutive), third person demonstrative (different form for ergative and absolutive), and third person lexical (different form for ergative and absolutive). A few errors are evidenced, including occasional failure to mark the ergative case, and occasional use of absolutive case on the object of an antipassive structure (i.e., marked as though it were an ergative-absolutive structure). As in Inuktitut child speech, valency alternating structures are used frequently. Although the data do not allow for detailed quantitative analysis, we can see that development occurs across the five children. Overall, the pattern of ergative acquisition and use in West Greenlandic is not obviously either similar or dissimilar to that in Inuktitut. However, my impression is that the transitive structures are more freely used in West Greenlandic child speech than in Inuktitut child speech, and also that the children produce more errors related to both ergative and antipassive than do children learning Inuktitut.

General discussion

We began this chapter by asking how child speakers of Inuktitut learn to use ergative structures in their language. What we have instead determined is that child speakers of Inuktitut tend not to use the transitive structure with ergative-absolutive
case marking to express bivalent propositions with third person Agents. Further, this pattern is not unique to young children, but rather extends to caregivers and also to older children and adults producing oral elicited narratives. Transitive structures are used to express only 7% of bivalent propositions in child spontaneous speech, 4% in caregiver spontaneous speech, 2% in adult narratives, and 0% in child narratives. Instead, speakers use the three valency alternating structures available in the language: antipassive, passive, and noun incorporation.

In spontaneous speech data, passive and noun incorporation structures are preferred for expressing bivalent propositions with third person Agents, each accounting for 30%-35% of such propositions, with antipassives somewhat less common. In narrative data, antipassive structures are preferred and account for 60%-75% of bivalent propositions. Noun incorporation structures are used more in both genres by adults than by children. The preference for one structure over another is undoubtedly partly due to the topics discussed and thus which verbs are used and what discourse emphasis is required. Noun incorporation is restricted to a relatively small set of verbs. Thus, it is required for some bivalent propositions and is prohibited for most. To a lesser extent, the passive structure is also used commonly with particular verbs (e.g., atjiliuq- ‘to film’, -tit- ‘CAUS’), and thus appears more when the discussion at hand requires those verbs. It is also preferred when the speaker chooses to focus on the action rather than on the Agent.

The other notable finding is that the transitive structure is the preferred one to express bivalent propositions with first and second person Agents. The passive structure is virtually never used with first and second person Agents in our data, while antipassive and noun incorporation are used more or less equally for between 10% and 25% of bivalent propositions each. There are at least two reasons why the transitive structure might be preferred to express bivalent propositions with first and second person Agents although it so rare with third person Agents. One potential reason is the difference in case marking requirements between the two types of Agents when appearing as subjects. First and second person subjects can only be realized in verbal inflection (i.e., not in pronouns). However, third person arguments may be realized as demonstratives or lexical noun phrases, in which case, they require ergative marking. Since ergative marking is much less common than absolutive marking, it may be dispreferred. Another potential reason is the difference in animacy between first/second person referents and third person referents. Since the former are higher on the animacy hierarchy (Silverstein 1987), they may be treated differently in terms of which syntactic structure is selected to express them. Some languages such as Dyirbal (Australia, Dixon 1972) have a split in morphological marking patterns based on person: clauses with first and second person subjects use nominative-accusative morphology while clauses with third person subjects use ergative-absolutive morphology (Dixon 1994). This
The acquisition of ergativity in Inuktitut is, however, the opposite to what we find in Inuktitut, so it is not clear whether animacy is the relevant phenomenon to explain the pattern we find in Inuktitut.

Given the findings in this chapter, we can also provide some answers to the question of whether Inuktitut is undergoing a similar change to that documented by Johns (2001, 2006) for Labrador Inuktitut where the antipassive structure (i.e., nominative-accusative morphology) is taking over from the transitive structure (i.e., ergative-absolutive morphology) as the new default to express bivalent propositions. The answer seems to be mixed. On the one hand, transitive structures with ergative morphology are rarely used to express bivalent propositions with third person subjects in Inuktitut in either spontaneous speech or elicited narrative. On the other hand, this structure is the preferred one to express bivalent propositions with first and second person subjects. In addition, for third person subjects, the default structure to express bivalent propositions appears to be the antipassive for elicited narratives, but a mixture of all three valency altering structures (i.e., antipassive, passive, noun incorporation) for spontaneous speech. Therefore, the picture is not clear. What is clear, however, is that the number of obligatory contexts for producing ergative morphology is very low in the spontaneous speech and narratives of both Inuktitut-speaking children and adults. As a result, both child and adult speakers of Inuktitut rarely use ergative morphology, although they use it correctly when the opportunity arises.

References


Appendix 1: Elicited Narrative from Grade 3 Participant (SJ)

(1) **Surusilu qimmilu takunnatui nirlnauljami.** (Antipassive)

surusi-Ø=lu qimmiq-Ø=lu takunnaq-juit nirlnauljaq-mik
boy-abs.sg=and dog- abs.sg=and watch-par.3pS frog-mod.sg
‘The boy and the dog are both watching the frog.’

(2) **Surusilu qimmilu sinittilugi nirlnaulja asiuju.** (Intransitive, Intransitive)

surusi-Ø=lu qimmiq-Ø=lu sinik-tit-lugit nirlnauljaq-Ø
boy-ABS.SG=and dog-ABS.SG=and sleep-ds-icm.3pS frog-ABS.SG
asiu-juq
lose-par.3sS
‘While the boy and the dog were sleeping, the frog left.’

(3) **Qimmilu surusilu tupagamik asiujijuuk nirlnauljamik.** (Intransitive, Anti-

qimmiq-Ø=lu surusi-Ø=lu tupak-gamik asiu-ji-juuk
dog-abs.sg=and boy-abs.sg=and wake-ctg.4dS lose-atp-par.3dS
nirlnauljaq-mik
frog-mod.sg
‘When the dog and the boy woke up, they lost the frog.’

(4) **Qiniq-gasuaq-liq-tsutik surusirulu qimmilu takuqajairtuuk.** (Antipassive, Anti-

qiniq=gsuaq-liq-tstik surusi-Ø=lu qimmiq-Ø=lu
look.for-try-incp-ctm.4dS boy-abs.sg=pej dog-abs.sg=and
see-can-NEG-par.3dS
‘When the little boy and the dog try to look for it, they can’t find it anywhere.’

(5) **Surusi qimmilu qinirasunginnatui.** (Antipassive)

surusi-Ø qimmiq-Ø=lu qiniq-gasuk-nginnaq-juit
boy-ABS.SG dog-ABS.SG=and look-for-try-still-par.3pS
‘The boy and the dog are still looking for it.’

(6) **Qinirasualirsuti surusirulu qimmilu takunnaurartilugu.** (Intransitive, Antipassive)

qiniq=gsuaq-liq-tsutik surusi-Ø=lu
look.for-try-incp-ctm.4dS
boy-ABS.SG=and look-for-try-still-par.3pS
‘The dog is falling to the ground, while the boy is watching him for a long time.’
The acquisition of ergativity in Inuktitut

(7) *Qimmi surusimi alupittu.* (Antipassive)
qimmiq-Ø surusi-mik alupiq-juq
dog-ABS.SG boy-MOD.SG lick-PAR.3sS
‘The dog is licking the boy.’

(8) *Surusilu qimmilu qinirasutsuti takuqajairtui napaartuni.* (Antipassive, Antipassive)
surusi-Ø=lu qimmiq-Ø=lu qiniq-gasuk-tsutik
boy-ABS.SG=and dog-ABS.SG=and look.for-TRY-CTM.4dS
taku-qajaq-it-juj napaartuq-ni
see-CAN-NEG-PAR.3pS tree-LOC.PL
‘The boy and the dog are trying to find it, but they can’t find it in the woods.’

(9) *Surusilu qimmilu qinirasuttui.* (Antipassive)
surusi-Ø=lu qimmiq-Ø=lu qiniq-gasuk-juj
boy-ABS.SG=and dog-ABS.SG=and look.for-TRY-PAR.3pS
‘The boy and the dog are trying to find it.’

(10) *Surusi mamaittuananimi naiju qimmi takunnatillugu.* (Antipassive, Antipassive)
surusi-Ø mamaq-it-juq-arnii-mik nai-juq
boy-ABS.SG taste.GOOD-NEG-that.which-smelly-MOD.SG SMELL-PAR.3sS
qimmiq-Ø takunnaq-tit-lugu
dog-ABS.SG watch-DS-ICM.3sS
‘The boy smelled a bad smell, while the dog was watching.’

(11) *Anguti napartumi killangani qiniirtilugu ...* (Antipassive)
anguti-Ø napaartuq-mi killak-ngani qiniq-tit-lugu
man-ABS.SG tree-LOC.SG hole-LOC.3Ssg look.for-DS-ICM.3sS
‘While the man was looking in the tree hole ...’

(12) *Surusi katattita irutsani, qimmi ullatautillugu.* (Passive, Passive)
surusi-Ø katak-tit-jaq igutsaq-nik qimmiq-Ø ulla-jau-tit-lugu
boy-ABS.SG fall-CAUS-PASS bee-MOD.PL dog-ABS.SG run-PASS-DS-ICM.3sS
‘The boy is knocked down by the bees, while the dog is being chased.’

(13) *Quarsaatita; uppi surusimi irisaaarisiju.* (Passive, Antipassive)
quarsaaq-tit-jaq uppik-Ø surusi-mik
be.SURPRISED-CAUS-PASS owl-ABS.SG boy-MOD.SG
irsi-saq-si-juq
be.AFRAID-WORK-AT-PRSP-PAR.3sS
‘He is shocked; an owl is scaring the boy.’
(14) Qimmi ujarau atani qinirtilugu una anguti tuttuup natjunnginni qaanganusuni. (Antipassive, Intransitive)
qimmiq-Ø ujarak-up ata-ngani qiniq-tit-lugu
dog-ABS.SG rock-ERG.SG bottom-LOC.3Ssg look-for-DS-ICM.3sS
u-na anguti-Ø tuttu-up natjuk-nginnik
this.one-ABS.SG man-ABS.SG caribou-ERG.SG antler-MOD.3Xpl
qaa-anganut-uq-tsuni
top-ALL.PL-arrive.at-CTM.4sS
‘While the dog was looking under the rock, this man gets on top of the caribou antlers.’

(15) Surusi tuttuup qaanganittu, qimmi qinirtilugu, uppimu takunnata. (Intransitive, Antipassive, Passive)
surusi-Ø tuttu-up qaa-ngani-it-juq qimmiq-Ø
boy-ABS.SG caribou-ERG.SG top-LOC.3Ssg-cop-par.3sS dog-ABS.SG
qiniq-tit-lugu uppik-mut takunnaq-jaq
‘The boy is on top of the caribou, while the dog is looking around, watched by an owl.’

(16) Katattitaisijui surusilu qimmi. (Passive)
katak-tit-jau-si-juit surusi-Ø=lu qimmiq-Ø=lu
fall-CAUS-PASS-PRSP-PAR.3pS boy-ABS.SG=and dog-ABS.SG=and
‘The boy and the dog are being knocked down.’

(17) Katattitai surusilu qimmi. imarmu. (Passive)
katak-tit-jaq-it surusi-Ø=lu qimmiq-Ø=lu imaq-mut
fall-CAUS-PASS-ABS.PL boy-ABS.SG=and dog-ABS.SG=and water-ALL.SG
‘The boy and the dog are knocked down to the water.’

(18) Imarniilirsi surusilu qimmi nallatu. (Intransitive, Intransitive)
imar-mi-it-liq-tsutik surusi-Ø=lu qimmiq-Ø=lu
water-LOC.SG-cop-incp-CTM.4dS boy-ABS.SG=and dog-ABS.SG=and
nala-juuk
lie.down-PAR.3dS
‘When the boy and the dog were in the water, they lay on their back.’

(19) Surusilu qimmi. imarmi qungattui. (Intransitive)
surusi-Ø=lu qimmiq-Ø=lu imaq-mi qungat-juit
boy-ABS.SG=and dog-ABS.SG=and water-LOC.SG smile-PAR.3pS
‘The boy and the dog are smiling in the water.’
(20) *Surusi nitjaajingingitu qimmimi.* (Antipassive)
surus-iØ nitja-ku-jii-ngii-jiq qimmiq-mik
boy-ABS.SG make.noise-want-ATP-NEG-PAR.3sS dog-MOD.SG
‘The boy doesn’t want the dog to make any noise.’

(21) *Surusilu qimmilu takurasisijui nirlinaujami.* (Antipassive)
surus-i=lu qimmiq-i=lu taku-gasuk-si-juq nirlinauqaj-mik
boy-ABS.SG=and dog-ABS.SG=and see-try-PRSP-PAR.3pS frog-MOD.SG
‘The boy and the dog are now trying to see the frog.’

(22) *Surusilu qimmilu takuuijui nirlinaujami.* (Antipassive)
surus-i=lu qimmiq-i=lu taku-juq nirlinauqaj-mik
boy-ABS.SG=and dog-ABS.SG=and see-PAR.3pS frog-MOD.SG
‘The boy and the dog see a frog.’

(23) *Surusilu qimmilu takuuuijui nirlinauqjani.* (Antipassive)
surus-i=lu qimmiq-i=lu taku-juq nirlinauqaj-nik
boy-ABS.SG=and dog-ABS.SG=and see-PAR.3pS frog-MOD.PL

(24) *Surusilu qimmilu nirlinaujami anirruutisujui nulurasuti ukuninga nirlinau-
jani.* (Antipassive, Antipassive)
surus-i=lu qimmiq-i=lu nirlinauqaj-nik
boy-ABS.SG=and dog-ABS.SG=and frog-MOD.PL
anirraaq-utii-si-juq nuluraq-tsutik uku-ninga
be.at.home-do.with-ATP-PRSP-PAR.3pS wave-CTM.4dS this.ONE-MOD.PL
nirlinauqaj-nik
frog-MOD.PL
‘The boy and the dog take the frog home while they waved to those frogs.’