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CHAPTER 8

ACQUIRING INUKTITUT

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Inuktitut is the language spoken by Inuit people in the Canadian Arctic. There are approximately 28,000 Inuit people living across the Canadian North. Nearly 40% of this population is under the age of 15. The Inuit of Canada live in the Northwest Territories, Northern Quebec, and Newfoundland. The acquisitional properties of Inuktitut reported in this chapter are derived from research that took place in Northern Quebec.

The ancestors of the Inuit people living in Northern Quebec inhabited this arctic tundra land as early as 9000 BC. These earliest people were part of the Dorset and pre-Dorset culture originating in Alaska. By 1000 AD these very early cultures were replaced by members of the Thule culture, people who traveled nomadically to eastern Canada from Alaska. The Thule culture remains the basis for the cultural traditions of the present Inuit inhabitants of Northern Quebec (Dorais, 1992a). This culture is based on the hunting of land and sea mammals and fish as well as the gathering of vegetation, duck down, and eggs, among other things. Traditionally, Inuit lived in family groupings, trav-

eling nomadically according to the seasons and the availability of wildlife and living in igloos, tents, and some sod and stone dwellings.

Today, life is quite different for the Inuit of Northern Quebec. For the last 30–40 years, they have lived a sedentary existence in 14 settlements located along the periphery of a vast peninsula that borders Hudson Bay on the west, the Straits of Hudson to the north, and Ungava Bay to the east. The settlements range in size from 110 people in the smallest to over 1,000 in the largest. The economy is no longer exclusively based on traditional hunting and gathering activities, but rather is divided between such traditional activities, cash jobs, and welfare support. Families now live in houses and apartments with telephones, televisions, running water, and numerous modern appliances purchased through local stores. Schools have been built in every community, some as late as the mid 1960s. At present, the schools and health care services are under local Inuit control. The Inuit of Northern Quebec also have autonomous governmental structures and a territory-wide land holding association.

With just this brief introduction to the present day situation of Inuit people in Northern Quebec, the rest of this chapter concentrates on their language and how it is acquired in the modern context. First, Inuktitut is described with reference to related languages and related populations of speakers spread across the circumpolar north from Siberia to Greenland. This is followed by a description of the cultural context for learning and speaking Inuktitut in Northern Quebec. The grammatical properties of the language are then compared to the English language with particular attention to the acquisition of some of these grammatical properties by young Inuit children. Finally, the chapter concludes with a brief look into the future of language use and acquisition in Northern Quebec.

WHO SPEAKS INUKTITUT AND RELATED LANGUAGES?

Inuktitut is a language in the Eskimo-Aleut family of languages. These languages are spoken around the polar regions in a vast circle extending from Siberia and Alaska through the Canadian Arctic to Greenland. There are some 137,000 people who can be considered members of the Eskimo and Aleut populations (Dorais, 1992b). Approximately 69% (94,877) of them speak their indigenous languages (see Table 8–1).

TABLE 8–1
Speakers of the Eskimo-Aleut languages.

Family	Branch	Subbranch	Population	% Speakers
Eskimo-Aleut	Aleut	Aleut	2,800	25%
	Eskimo	Inuit	105,500	72%
		Yupik	29,000	62%

Sources: Data from "Les langues autochtones d'hier à aujourd'hui," by L. J. Dorias, 1992. In J. Maurais, Ed. *Les langues autochones du Québec* (pp. 63–113). Québec: Publications du Québec; and "La situation linguistiques dans l'arctique. *Inuit Studies, 16,* 237–235.

Speakers of the Inuit group of languages include people from Alaska, the Canadian Arctic, and Greenland. There are subdivisions of the Inuit language group. People in Alaska speak a language known as *Inupiaq,* whereas people in the Western Canadian Arctic speak *Inuktun. Inuktitut* is the language of Eastern Canadian Inuit and *Kalaallisut* is the language of Greenlanders or *Kalaallit,* as they call themselves. These subdivisions of the Inuit language are somewhat but not completely mutually intelligible to speakers from the different regions.

The number of speakers of Inuit languages varies widely in each of the countries where they live (Dorais, 1990). In Siberia, for instance, the number of people who are still able to speak their indigenous language is negligible and limited to older people. Speakers of Inupiaq in Alaska range from 26% to 48% of the population, depending on the various regions of their territory. The Canadian situation is even more disparate; only 25% of the population in the Western Canadian Arctic speak Inuktun, whereas 99% of the population of Northern Quebec speak Inuktitut. Greenland presents the most salutatory indigenous language situation with a countrywide figure of 98% of the population speaking Kalaallisut.

Retention and erosion of these indigenous languages appears to be related to a set of interconnected factors. In part, there is a relationship between language erosion and the advent of second-language speakers and particularly of schools with second-language instruction. In Canada, for example, schools were established first in the Western Arctic. In turn, this is the territory with the smallest percentage of speakers of an Inuit language in Canada. Language retention, on the other hand, appears to be related to indigenous language instruction at school and literacy in the indigenous language (Dorais, 1990). The following three examples from Alaska, Northern Quebec, and Greenland show how such factors have created various patterns of language usage.

In Alaska, a writing system for Inupiaq (using the Roman alphabet) was developed in 1946 and revised in the 1960s by a native speaker of Inupiaq in collaboration with missionary linguists from the Summer Institute of Linguistics. Since the 1940s most parents have not spoken Inupiaq with their children. These parents were members of a generation of people who were taught in English in school and were punished for speaking their native language. To spare their children the same fate, and under the impression that English would help their children get ahead in the world, many parents have spoken only English in their homes. Tenacious efforts to teach Inupiaq as a second language have taken place since 1972. However, only 5,000 out of 13,000 people still use this language and only a few isolated communities have any fluent speakers under 20 years of age (Dorais, 1990).

The situations in Northern Quebec and Greenland contrast sharply with the Alaskan one. In Northern Quebec, Inuktitut orthography was developed by missionaries around 1865. A certain Reverend Peck (known also as *Uqammak*) sent religious literature in syllabics all over the region. By 1925, most Inuit in the region were literate, having learned to read at home from their parents. Schools were established very late in Northern Quebec because of provincial-federal jurisdictional misunderstandings. As a result, many communities had no schools and no second-language instruction until the mid 1960s. A scant 10 years later, a land claims settlement, the James Bay Northern Quebec Agreement, gave Inuit of this region control over their own schools. With local control came the creation of Inuktitut language instruction, the training of Inuit teachers, and the prodigious production of pedagogical materials in the native language. By 1981, 5,160 of the 5,330 people in Nunavik were still speakers of Inuktitut (Dorais, 1990, 1992a, 1992b).

The language retention situation in Greenland is even more remarkable (Dorais, 1990). Greenlandic, or Kalaallisut, has been written since the early 1700s when Danish missionaries began translating the Bible and teaching in the native language. Schools in Kalaallisut were set up over 260 years ago and today there is a university where students may study through the doctoral level at least partially in their indigenous language. This very early literacy and educational history, together with geographic isolation and long-standing political autonomy, have created the only country of Inuit speakers where the indigenous language is the official language. Despite the discrepancy between the Greenlandic situation and the impoverished language use patterns of Siberia, Alaska, and the Western Canadian Arctic, the Inuit language group is still considered to be one of the very few indigenous language groups in the world with a long-term chance of survival (Foster, 1982).

THE CULTURAL CONTEXT FOR SPEAKING AND LEARNING INUKTITUT

Inuktitut as it is spoken in Northern Quebec is learned by children in a cultural context that is both traditional and evolving. Ethnographic studies of language socialization practices in Inuit homes and schools of Northern Quebec have documented the culturally based interactions that provide a framework for language acquisition both in family settings (Crago, 1988; Crago, 1992; Crago, Allen, & Hough-Eyamie, 1997; Crago, Annahatak, & Ningiuruvik, 1993) and in classrooms (Crago & Eriks-Brophy, 1993a, 1993b; Crago, Eriks-Brophy, Pesco, & McAlpine, 1997; Eriks-Brophy, 1992; Eriks-Brophy & Crago, 1993, 1994). The family language socialization study focused on four children (aged 1;0 to 1;9 at the outset) and their families who live in two small remote communities on Ungava Bay in Northern Quebec. These families were videotaped for 1 year every 4 months. This study also included interview data from 20 older and younger mothers. As these children became school-aged, school practices of language socialization with their Inuit teachers from kindergarten to Grade 2 were documented with classroom videotapes and teacher interviews. This study was followed by continued research with the same children, their classmates, and their non-Inuit second-language teachers in Grade 3, when the language of instruction shifted from Inuktitut to English or French. In the next part of this chapter, findings from both the home and the school studies are described.

FAMILY STRUCTURE

To begin, the Inuit of Northern Quebec still live, for the most part, in close connection with their families. These families are structured in somewhat different ways than those that have typically been associated with the North American white middle class (WMC). Often young mothers or young couples will live with their first children in their parents' home before moving out on their own. Caregiving in these homes is spread over a number of people. A child's young aunts, uncles, and grandparents are highly involved in interactions with the child. Even today, children are raised, for the most part, in multiaged, multiparty talking environments. At a young age, children are oriented

toward a great deal of interaction with their age-similar peers. One- and 2-year-olds observed during the home language socialization study played daily with cousins or near-age brothers, sisters, and friends. Peer talk among the 1- to 3-year-olds involved pretend play with and without toy props and talk that accompanied physical play. A number of older women, past their own child-bearing age, raise children that they have adopted. Caregiving in their homes is often shared with older sibling caregivers. Custom adoption is, in fact, a very frequent practice in Northern Quebec for women of all ages. In the communities where our research took place, as many as 40% of the children were adopted into and out of their families. This meant that the four children in our study were being raised by women from two different age groups: those in their late 40s and those in their early 20s. Such an age differential in the mothers allowed a fortuitous historical perspective on caregiving practices and the possibility to document diachronic change.

OLDER WOMEN'S LANGUAGE SOCIALIZATION PRACTICES

Inuit language socialization practices in the homes with more traditional mothers were strikingly different from what has been documented for North American WMC homes (Crago, 1992; Crago, Allen, et al., 1997; Heath, 1983; Schieffelin & Eisenberg, 1984). Mothers over 45 years of age used language socialization practices that included a specific baby word lexicon, a special register of affectionate talk, the deliberate exclusion of young children from adult conversations, and highly frequent use of the imperative form in directives to the child. In comparison with what has been reported for North American WMC mothers, these older Inuit mothers never asked questions of the children to which they already knew the answer, they made no requests for displays of expressive language from the child, and they rarely expanded their children's utterances. In addition, young children's early vocalizations were not interpreted as meaningful. Considerable behavior, including companionship and discipline, as well as such activities of daily living as bedding, bathing, dressing, and eating were co-constructed in silence. As a result, the young children of these older women rarely had the role of conversational partners with their mothers. In fact, these mothers engaged in about one third as much conversation with their children as younger Inuit mothers and about one sixth

as much as a comparison group of American WMC mothers (Hough-Eyamie, 1993; Hough-Eyamie, Pan, Crago, & Snow, in preparation). Instead, most of the children's verbal interactions took place with their peers and siblings. Sibling caregivers involved themselves in frequent repetition routines with the children in which they explicitly modelled the production of such things as Inuit greeting routines. Inuit children were also frequently in multi-age gatherings in which they were exposed to considerable overheard language. Despite such differences in language socialization, Inuit children attain developmental language milestones in much the same manner as has been reported for North American WMC children. As described later in this chapter, the acquisition of particular structural features, of course, differs from acquisition patterns in other languages and appears to be related to the typology of the Inuktitut language and the structural properties of the overheard input that Inuit children are exposed to (Allen, 1996a; Allen & Crago, 1996; Crago, Allen, et al., 1997).

DIACHRONIC CHANGE: YOUNG MOTHERS' LANGUAGE SOCIALIZATION PRACTICES

Inuit socialization practices in Northern Quebec show the effects of diachronic change. Young Inuit mothers' ways of talking to their children do not completely resemble the older, more traditional mothers' ways (Crago et al., 1993). Over time, North American WMC practices are being adopted and used by young Inuit women. Some of the young mothers stated explicitly that they talked to their children in certain ways to copy the patterns of WMC people, whom they characterized as more "educated," and to prepare their children for school and the kind of discourse that the non-Inuit second-language teachers would use in the classroom. For instance, young mothers described themselves as using less of the special baby word vocabulary, less of the register of affectionate talk, and none of the rhythmical verses that older mothers created for their young babies. In addition, they differed strikingly from the older mothers in their use of questions that elicit labeling from the child as well as in the use of repetition routines to practice second-language politeness words and counting sequences. Furthermore, certain young mothers requested verbal displays from their children in the form of recounting experiences to others. The overall pattern of change was one of younger mothers engaging with their children as conversational partners in ways that were quite different from older mothers.

This involved, in addition to the features described, an increase in conversational interactions in a given time period.

Older Inuit women sometimes complained about the changes that were happening in the ways of talking with children. They blamed some of the changes on the advent of WMC teachers into their communities—teachers they felt brought not only their language but also their culture's patterns of communicative interaction into the lives of Inuit children. Similarly, changes in child-rearing practices and language socialization have evolved in other places throughout the circumpolar region. When one of the authors reported on her findings about language socialization in older mothers' homes in Northern Quebec, a number of Inuit women in the audience echoed the diachronic nature of change in their comments. A Greenlander said, "What you have described is the way things were in my mother's house." An Inuk woman from the Western Canadian Arctic said, "Sadly, I only know what you speak of from my grandmother's house."

LANGUAGE SOCIALIZATION IN SCHOOLS

Commentary about the role of schools in inducing change in home patterns of socialization motivated a set of studies of the classroom context for language learning in communities in Northern Quebec. The same four children who were studied in their homes were followed into their classrooms, where for the first 3 years of their education they had Inuit teachers instructing them in Inuktitut. Ethnographically framed microanalysis of their language lessons demonstrated a form of instructional discourse that is quite different from what has previously been reported for North American WMC teachers (Crago & Eriks-Brophy 1993a, 1993b; Eriks-Brophy, 1992; Eriks-Brophy & Crago, 1993, 1994; Mehan, 1979). In Inuit teachers' classrooms, the children were instructed to attend to their peers, group nomination and response formats were used, students were not expected to raise their hands to be called on, modeling written work after another student's work was acceptable, teachers rarely evaluated students' responses in front of others, and individual displays of expressive language in front of the group were rarely requested from the children. Furthermore, students' initiations were frequently incorporated into the lesson by the Inuit teachers.

As the four children continued their education past Grade 2, they encountered non-Inuit teachers for the first time. Their language of instruction shifted to English or French and, at the same time, the

discourse of language instruction in the classroom changed (Crago, Eriks-Brophy, et al., 1997; Eriks-Brophy, 1997). With the non-Inuit teachers, Inuit children were expected to raise their hands, wait to be called on as individuals, required to speak in front of the group, and then were publicly evaluated on their performance. The lessons were largely teacher controlled, with the children being directed to attend to the teacher and not to each other. Their initiations were rarely incorporated into the lessons. Such differences from the Inuit teachers' ways of teaching demonstrate the culturally based and culturally variable nature of classroom discourse. They also demonstrate the potential for miscommunication across the cultural lines. Such miscommunications made these Inuit children's transition to their second-language classrooms very challenging. The power differentials between the students and their teachers meant that miscommunications could result in punitive and personally unpleasant situations for the children (Crago, Eriks-Brophy, et al., 1997).

The cultural context for Inuit children who are learning language, both their mother tongue and a second language, is a complex mixture of old and new, home and school. The educational and parental patterns of adaptation bridge two worlds in a time of rapid and often disruptive change. The potential for loss of a highly valuable language as well as the cultural patterns for its use in social interaction is considerable.

LINGUISTIC STRUCTURE OF INUKTITUT

Though both home and school offer rapidly changing patterns of socialization into language use, almost 100% of the Inuit children in Northern Quebec are still learning Inuktitut as their first language. Inuktitut as a language remains relatively strong overall, and is still the major if not only language used in input to Inuit children in most of this region. This section presents information about the patterns young Inuit children follow in learning the morphology and syntax of their language. First, however, some major aspects of the linguistic structure of Inuktitut are described. For purposes of clarity, they are presented in contrast with the comparable structural properties of English.

Inuktitut, like other languages in the Eskimo–Aleut family, is of rather complicated structure. It is a polysynthetic language, its case system is ergative, and it employs a large number of nominal and verbal inflections. Typical word order is subject-object-verb, though ellipsis of both the subject and object is common. In contrast, English is basically an analytic language. Its case system is accusative and it employs relatively few nominal or verbal inflections. Typical word order in English is subject-verb-object and ellipsis of subjects and objects is forbidden in most cases. The following paragraphs discuss each of these structural properties. Further details may be found in Dorais (1988).

POLYSYNTHESIS

Polysynthesis is a common property of many Native American languages and Inuktitut is one of the best known examples of a polysynthetic language. A polysynthetic language is able to express in one word of several morphemes what would require a sentence of several individual words in a more analytic language like English. Much of the syntax of the language occurs within an individual word expressed by the relationships between morphemes, rather than within a sentence expressed by relationships between words. Thus, polysynthetic languages tend to have more morphemes per word than other types of languages. In addition, many of those morphemes express syntactic functions such as adjectival or adverbial modification, negation, changing word classes, and changing valency. Examples such as that in 1 are common in terms of number, type, and function of morphemes.[1]

[1] The following abbreviations are used:

For nominal case: ABS = absolutive; ALL = allative (*to, with,* agentive *by*); ERG = ergative; MOD = modalis (oblique case for direct object).

For verbal modality: CSV = causative; IMP = imperative; IND = indicative; INT = interrogative; PAR = participial (functionally equivalent to indicative in Northern Quebec Inuktitut).

For word-internal morphology: ANTP = antipassive; CAUS = causative; EMPH = emphatic; FUT = future; NEG = negative; NOM = nominalizer; PASS = passive; PAST = past; PERF = perfective; POL = politeness (preceding imperative); PRES = present.

For verbal inflection: 1 = 1st person; 2 = 2nd person; 3 = 3rd person; s = singular; d = dual; S = subject; O = object.

For nominal inflection: SG = singular; PL = plural.

(1) *Illujuaraalummuulaursimanninginamalittauq.*
illu-juaq-aluk-mut-uq-lauq-sima-nngit-gama-li-ttauq
house-big-EMPH-ALL.SG-go-PAST-PERF-NEG-CSV.1sS-but-also
"But also, because I never went to the really big house."
(Dorais, 1988)

This word begins as a nominal with the noun root *illu-* "house." The nominal part of the word includes word-internal morphemes that express adjectival modification (*-juaq-* "big") and emphasis (*-aluk-* "EMPH"), and ends with a case marker indicating case and number of the nominal (*-mut-* "ALL.SG"). The word changes class to become verbal with the affixation of the verbalizer *-uq-* "go to." The verbal part of the word is then affixed with a number of word-internal morphemes including time or tense (*-lauq-* "PAST"), aspect (*-sima-* "PERF"), and negation (*-nngit-* "NEG"). The grammatical part of the word ends with a portmanteau cross-referencing inflection giving information about the verbal modality and person and number of the subject (*-gama* "CSV.1sS"). Finally, there are two enclitics that give additional information joining this word to other words and concepts in the discourse (*-li* "but," *-ttauq* "also"). Note that morphophonological processes often change or delete consonants at morpheme boundaries, so that the appearance of a morpheme in a word may be different than its underlying form given in the glosses here.

MORPHOLOGICAL STRUCTURE

The structure of words in Inuktitut is somewhat more complex than in English, as might be expected. Word roots in Inuktitut fall into three main classes—verbs, nouns (including pronouns and demonstratives), and uninflected particles (including conjunctions, interjections, and some adverbials). Uninflected particles are independent and appear without any additional morphology. Verb and noun roots may never appear alone. Rather, they may be followed by word-internal morphemes and must always be followed by appropriate cross-referencing inflections.

Each verb or noun root may be followed by up to at least 8 morphemes from among the over 400 word-internal morphemes used productively in this language, including independent verbs, auxiliaries, adverbials, adjectivals, tense (or time) markers, and the like. As seen

in Example 1, word-internal morphemes may change the class of a word from nominal to verbal or the reverse, and may also change the valency of a verbal word from transitive to intransitive or the reverse.

Each verbal or nominal stem (i.e., root plus word-internal morphemes) must then be followed by 1 of over 900 verbal or over 100 nominal cross-referencing inflections, respectively. Verbal cross-referencing inflections include information about verbal modality (indicative, interrogative, imperative, etc.) as well as the person and number of both the grammatical subject and grammatical object of the verb. Nominal cross-referencing inflections include information about case (absolutive, ergative, locative, etc.) and number of the nominal as well as the person and number of the possessor if relevant. All these inflections are considered portmanteau morphemes in that the total information contained in them is reflected in one indivisible form. Although these inflections were historically separable into their component parts, they are no longer reliably and consistently separable in this manner.

Finally, one or more optional enclitics may be affixed to either verbal or nominal words, as seen in Example 1.

SYNTACTIC STRUCTURE

ERGATIVITY

In terms of case marking, Inuktitut is a morphologically ergative language. In an ergative language, the subjects of intransitive verbs and the objects of transitive verbs group together, both receiving absolutive case marking. The subjects of transitive verbs form a separate group by themselves, receiving ergative case marking. This pattern is illustrated by Examples 2a and 2b.

(2a) *Jaani nirijuq.*
Jaani-θ niri-juq
Johnny-ABS.SG eat-PAR.3sS
"Johnny is eating."

(2b) *Jaaniup iqaluk nirijanga.*
Jaani-up iqaluk-θ niri-janga
Johnny-ERG.SG fish-ABS.SG eat-PAR.3sS.3sO
"Johnny is eating the fish."

The ergative system of Inuktitut contrasts with the accusative system in languages like English, in which subjects of both transitive and intransitive verbs group together receiving nominative case marking, with objects of transitive verbs constituting a separate group receiving accusative case marking. This pattern is shown in Example 3, using English pronouns.

(3a) She sleeps.

(3b) She likes her.

Ergativity is only visible in the nominal case marking system in Inuktitut. It is not visible in the verbal cross-referencing inflection system, because the cross-referencing morphemes conflate information about verbal modality as well as person and number of subject and object together into one form that is no longer separable into its individual parts. As it is not possible to tell which part of the cross-referencing inflection indicates subject or object, it is also not possible to determine any pattern of ergativity-related grouping in the cross-referencing inflections.

CLAUSE STRUCTURE

Inuktitut, like English, has two basic clause types—intransitive and transitive—as illustrated in Examples 2a and 2b, respectively. The intransitive clause in 2a contains a verbal root and only one argument, a subject marked with absolutive case, which is cross-referenced in verbal inflection. The transitive clause in 2b contains a verb and two arguments, a subject and a direct object, which are both cross-referenced in verbal inflection. As is typical in ergative languages, the absolutive case on the direct object is the same as that on subjects of intransitive sentences, with the ergative case on the subject unique to that position.

In addition to these basic clause types, Inuktitut allows for several types of derived clauses including antipassives, passives, causatives, and noun incorporation structures, as shown in Examples 4 through 7, respectively. Note that English allows passives and causatives, but not antipassives or noun incorporation structures. Antipassives are typical to ergative languages and noun incorporation structures are often found in polysynthetic languages.

(4) *Jaani iqalummik nirijuq.*
Jaani-θ iqaluk-mik niri-θ-juq
Johnny-ABS.SG fish-MOD.SG eat-ANTP-PAR.3sS
"Johnny is eating a fish."

(5) *Iqaluk Jaanimut nirijaujuq.*
iqaluk-θ Jaani-mut niri-jau-juq
fish-ABS.SG Johnny-ALL.SG eat-PASS-PAR.3sS
"The fish was eaten by Johnny."

(6) *Miajiup Jaani nirititanga.*
Miaji-up Jaani-θ niri-tit-janga
Mary-ERG.SG Johnny-ABS.SG eat-CAUS-PAR.3sS.3sO
"Mary is making Johnny eat."

(7) *Jaani iqaluturtuq.*
Jaani-θ iqaluk-tuq-juq
Johnny-ABS.SG fish-consume-PAR.3sS
"Johnny is eating a/the fish." [cf. "Johnny is fish-eating."]

As the antipassive morpheme is often not overt, as in Example 4, antipassive clauses often look like transitive clauses in which the object is not cross-referenced in verbal inflection. For this reason, they are sometimes referred to as "half-transitive," "semi-transitive," or "accusative" clauses.

WORD ORDER

Basic word order in Inuktitut is generally assumed to be subject-object-verb, in contrast to the subject-verb-object order of English. Deviations from this basic word order in both languages typically indicate a pragmatic or stylistic effect.

One striking aspect of Inuktitut is that subjects and objects are often not represented as independent lexical items, but rather only through verbal cross-referencing inflection. Thus, sentences in Inuktitut tend to be composed primarily of verbal words with relatively few nouns. The prolific ellipsis of independent subjects and objects means that word order is not a particularly useful determinant of syntactic structure in Inuktitut. This pattern contrasts with English in which subjects and objects must typically be obligatorily represented as either full nouns, noun phrases, or pronouns and in which word order is the primary determinant of syntactic structure.

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HIGHLIGHTS OF THE ACQUISITION OF INUKTITUT GRAMMATICAL STRUCTURE

The body of research investigating the acquisition of grammatical structure in Eskimo-Aleut languages is small but growing. Fortescue (1985) and Fortescue and Lennert Olsen (1992) have documented various aspects of morphological and semantic acquisition in six west Greenlandic children aged 2;2 through 5;2, with Wilman (1988) reporting on aspects of morphological and syntactic acquisition in a group of kindergarten students in the Northwest Territories in Canada. Finally, Allen (1989, 1995, 1996a), Allen and Crago (1989, 1992, 1996), Allen and Schröder (in press), Crago (1995), Crago and Allen (1996a, 1996b), Crago, Allen, and Genesee (1996) and Crago, Allen, et al. (1997) have documented several aspects of morphological and syntactic acquisition in eight children aged 1;0 through 3;6 in Northern Quebec.

This section focuses on the latter body of work, in keeping with the Northern Quebec emphasis. It begins with a discussion about quantifying language abilities in Inuktitut through use of mean length of utterance (MLU) figures. It then gives information about the one- and two-morpheme stages (including use of baby word vocabulary), representation of subjects and objects, and acquisition of noun incorporation structures, passives, and causatives. This information is presented in terms of individual structures rather than by age or MLU because not enough is yet known to present a comprehensive overall picture of Inuktitut language development. Finally, this section raises the question of the role of input in acquisition and discusses some contributions that Inuktitut acquisition research can make to language acquisition theory.

MEAN LENGTH OF UTTERANCE

Much of the research on language acquisition in general begins with quantitative measures of children's language at different stages in development. One typical measure used is Brown's (1973) mean length of utterance (MLU). The length in productive morphemes of a set number of utterances, minimally 100, is measured and the mean of these utterance lengths constitutes the MLU. Though this measure is known to

TABLE 8–2
Mean length of utterance data (adapted from Allen, 1996).

Subject	Age	Hours of data	No. of utterances	MLU
Elijah	2;0	2.05	805	2.51
	2;5	1.87	621	3.56
	2;9	1.95	731	3.39
Lizzie	2;6	2.05	654	2.81
	2;10	2.03	693	3.24
	3;3	1.00	248	3.39
Louisa	2;10	2.02	288	1.99
	3;2	2.38	643	2.89
	3;6	2.35	632	2.89
Paul	2;6	1.93	310	2.51
	2;11	0.95	220	2.91
	3;3	2.3	460	3.19
Total		**23.28**	**6,305**	

have a number of limitations, it is generally considered the best method available to indicate a child's increasing knowledge of grammar under the logic that a child's utterances will gradually lengthen as a child acquires more grammatical knowledge. Thus, MLU is used as an index of a child's own development as well as a comparison of development across children. This measure has proved useful in Inuktitut child language research to date. It accurately reflects the development of grammatical abilities in the four subjects under study whose language has been analyzed in this regard, as shown in Table 8–2. However, certain cautions must be taken into consideration as indicated below.

Inuktitut presents some unique problems for the calculation of MLU. The primary difficulty lies in determining what constitutes a productive or uniquely analyzed morpheme for the Inuktitut-speaking child. In a language like English in which each word in child language is typically composed of two morphemes at most, productivity is relatively easy to determine as there is relatively little opportunity for fixed forms to occur. However, in a language like Inuktitut in which early multimorphemic utterances almost always consist of two morphemes rather than two separate words and in which words of three and more morphemes appear fairly early in the acquisition

process, productivity is not so easy to determine. Inflectional affixes may well not be productively used until some time after they are first produced. Additionally, it is quite conceivable that one morpheme in a word is productive, with the composite of two or more others still constituting a fixed form for the child. A more conservative approach to acquisition may well assume that Inuktitut-speaking children take some time to sort out the analysis of certain morpheme combinations into their separate components.

A thorough approach to the productivity problem might involve assessing each morpheme and morpheme combination for its productivity. Commonly used criteria include presence in the corpus of novel utterances misusing a morpheme in a way indicating productivity, use of the relevant morpheme in contrasting morphological environments, and phonological errors in use of an individual morpheme that indicate a child is not merely parroting a fixed morpheme combination (Allen, 1996a). Creative errors on the part of a child tend to constitute the strongest evidence of productivity, but these are generally rare. The other criteria provide less strong evidence, but are convincing especially when combined. The most important factor in calculating and interpreting MLU is that one be clear about exactly what one is counting as a productive morpheme and about which kinds of utterances are being used in the overall data set.

A final problem in using quantifiable measures such as MLU is determining their comparative value crosslinguistically. It is not at all clear that an MLU of 3.5 means the same thing for an English-speaking child as for an Inuktitut-speaking child. It may well be the case that Inuktitut-speaking children use more morphemes earlier or use more morphemes, in general, since Inuktitut has so much more morphology available than does English and it is so much more focused on morphology. The problem of crosslinguistic comparability of MLU figures is well known; the specifics related to Inuktitut remain to be determined through further research.

THE ONE-MORPHEME STAGE

Inuktitut-speaking children, like English-speaking children, typically begin their production of language by uttering one word at a time. In Inuktitut, these words may be uninflected particles that may freely stand alone (Example 8a), or single noun (Example 8b), or verb (Example 8c) root morphemes that appear without inflection.

(8a) *Auka*
"No" (Tumasi 1;9)[2]

(8b) *Piipi*
"Baby" (Sarah 1;4)

(8c) *Amaama*
"Suckle" (Jini 1;0)

The verbal utterances are particularly non–adult-like, as verb roots can never appear without cross-referencing inflection in adult language. Though noun roots also require case inflection, the most common absolutive singular inflection is not phonetically overt. It is likely that children do not yet realize that at the one-morpheme stage, but nevertheless their nominal words do not differ in appearance from the adult forms.

The range of vocabulary used at this age is typical of child language crosslinguistically (e.g., Nelson, 1973). In addition, many of the verb and noun roots produced are part of the Inuktitut baby word vocabulary, a special vocabulary of words frequent in input to young children, and in the speech of the children, themselves, until about age 3;0. Baby words in Inuktitut tend to be phonologically simpler than, though usually phonologically unrelated to, their adult counterparts. The utterances in Example 9 are typical baby words; their adult counterparts are shown in brackets.

(9a)	*Apaapa*	[adult: *Nirigumavunga.*]
		[niri-guma-vunga]
		[eat-want-IND.1sS]
	"Food / Eat."	["I want to eat."] (Jini 1;0)
(9b)	*Atai*	[*adult: Anilaurluk.*]
		[ani-lauq-luk]
		[go.out-POL-IMP.1dS]
	"Go outside."	["Let's go outside."] (Sarah 1;4)

In caregiver input, baby words may appear as unique lexical items as in the child utterances in the examples, but they are very often affixed with the normal range of word-internal and inflectional affixes. Thus, although baby words accommodate to the early phonological abilities

[2] Pseudonyms are used to identify all children whose utterances are reported herein, as well as all persons mentioned in these utterances.

of children, adults even in this domain do not try to mask the morphological complexity that is an integral part of Inuktitut (Crago & Allen, 1996b).

EARLY TWO-MORPHEME COMBINATIONS

As soon as English-speaking children graduate from mere single-word utterances, they enter what is commonly known as the two-word stage, or telegraphic stage. For Inuktitut-speaking children, this stage is more a two-morpheme stage because of the highly polysynthetic nature of Inuktitut (Crago, 1995; Crago, Allen, et al., 1996; Crago, Allen, et al., 1997). In addition, it does not appear as telegraphic in comparison to adult language as does English, as nominal ellipsis is very common in adult Inuktitut. Inuktitut-speaking children in this stage typically use either grammatical or lexical two-morpheme constructions. Grammatical constructions are composed primarily of a verb root plus cross-referencing inflection (Example 10a) or a noun root plus possessive marker (Example 10b).

(10a) *Qaigit.*
qai-git
come-IMP.2sS
"(You) come here." (Jini 1;8)

(10b) *Uiliup.*
Uili-up
Willie-ERG.SG
"Willie's." (Lucasi 2;8)

Lexical constructions commonly take a number of forms, including a proper noun plus greeting morpheme (Example 11a) and a noun plus adjectival morpheme (Example 11b).

(11a) *Anaanai.*
anaana-ai
mother-greetings
"Hi, mother." (Tumasi 1;9)

(11b) *Qimmialuk.*
qimmiq-aluk
dog-bad
"Bad dog." (Lucasi 2;8)

Several two-word utterances also occur, although they are in the minority. Most of these consist of a vocative proper noun plus a noun, location, or relational word in a kind of command structure (Example 12a). It is extremely rare to find a two-word utterance composed of a verb root and either a subject or object (Example 12b).

(12a) *Auka Siasi.*
auka Siasi
no Jessie
"No, Jessie." (Sarah 1;11)

(12b) *Iqaluk uvaa-.*
iqaluk uvaa
fish bleed
"The fish is bleeding." (Tumasi 2;1)

The range of semantic groupings found in utterances at this stage in Inuktitut is quite comparable to that reported for typical English acquisition (Brown, 1973; Crago, 1995).

ARGUMENT REPRESENTATION

Once Inuktitut-speaking children move beyond the two-morpheme stage, they begin producing utterances that have subjects and objects represented independently, as nouns (Example 13a) or demonstrative pronouns (Example 13b), as well as in the cross-referencing inflection. However, they are sensitive from a quite young age to the fact that adult Inuktitut exhibits rampant ellipsis of independent subjects and objects (Example 13c). The examples in 13 illustrate each of these three possibilities for an intransitive sentence with a subject.

(13a) *Panik, piarait sinisijuq.*
panik piaraq-it sinik-si-juq
daughter baby-your.ABS.SG sleep-PRES-PAR.3sS
"Daughter, your baby is sleeping." (Paul 3;3)

(13b) *Una sinisimmat.*
u-na sinik-si-mmat
this.one-ABS.SG sleep-PRES-CSV.3sS
"This one is sleeping." (Lizzie 2;10)

(13c) *Sinilirmat.*
sinik-liq-mmat
sleep-PRES-CSV.3sS
"(He/she/it) is sleeping." (Elijah 2;9)

Although English-speaking children aged 2;5 through 2;10 produce independent subjects about 65% of the time and independent objects about 95% of the time (Wang, Lillo-Martin, Best, & Levitt, 1992), Inuktitut-speaking children aged 2;0 through 3;6 produce independent subjects only about 15% of the time and independent objects only about 35% of the time (Allen & Schröder, in press). Although both these groups of children are failing to produce independent subjects and objects some of the time, the difference between the rates at which they do this indicates that each group of children has a great deal of knowledge about their respective target language patterns with respect to argument representation.

The choice of Inuktitut-speaking children to produce or fail to produce independent subjects and objects does not appear to be random. Rather, this choice is related to the pragmatic prominence of the referents that they are representing in their speech. Inuktitut-speaking children produce more independent subjects and objects when talking about referents that are absent from the physical context, referents that have not previously been mentioned in discourse, and referents about which some confusion could arise for discourse or context reasons (Allen & Schröder, in press). This finding is consistent with general discourse theories (Chafe, 1987; Clancy, 1980; DuBois, 1987) and findings for child language in Korean (Clancy, 1993). Thus, Inuktitut-speaking children at a fairly young age demonstrate a large degree of knowledge about what information is shared between the speaker and hearer and what information is not shared and therefore needs to be made explicit.

NOUN INCORPORATION

Noun incorporation is a construction fairly typical of polysynthetic languages in which a noun is incorporated into a verbal word, as illustrated in Example 7. In Inuktitut, the incorporated noun is almost always the object of the sentence. Though this construction is not available at all in English, it is quite common in Inuktitut and begins to appear fairly early in the process of Inuktitut acquisition. A few utterances containing noun incorporation constructions appear at the two-

morpheme stage, such as seen in Example 14, although it is not clear that they are yet productive.

(14) *Tiituq.*
tii-tuq
tea-consume
"(I want to) drink tea." (Sarah 1;11)

By the age of about 2;6 to 3;0, such constructions form approximately 10% of children's utterances containing verbs (Allen, 1996a), including such utterances as those in Example 15.

(15a) *Qangattajuuliaqqauju.*
qangattajuuq-liaq-qqau-juq
airplane-go.to-PAST-PAR.3sS
"She went to the airplane." (Elijah 2;0)

(15b) *Tuttusiulaaqinuk?*
tuttu-siuq-laaq-vinuk
caribou-look.for-FUT-INT.1dS
"Will we go look for caribou?" (Paul 2;11)

More advanced forms of this construction begin appearing some months later, including double incorporation (Example 16a) and stranding of elements modifying the incorporated noun (Example 16b). (Note that Elijah is a particularly precocious child in terms of language development, and thus the age at which he produces these utterances is substantially younger than that of his coevals.)

(16a) *Sunaturtuviniuvunga.*
suna-tuq-juq-viniq-u-vunga
what-consume-NOM-former-be-IND.1sS
"What did I have to eat before [= I am one who had what to eat before]." (Elijah 2;5)

(16b) *Maasiukkut imaittunik saviqarqut.*
Maasiu-kkut imaittuq-nik savik-qaq-vut
Matthew-group one.like.this-MOD.PL knife-have-IND.3pS
"Matthew and his friends have knives like this." (Elijah 2;9)

The early acquisition of noun incorporation structures indicates that Inuktitut-speaking children are sensitive to and comfortable with the

polysynthetic structure of their language from a quite early age—likely from almost as soon as they begin putting two morphemes together.

PASSIVES

The literature on language acquisition typically records that English-speaking children reliably comprehend basic passives only by about age 4;0 and more complex passives only by well into the school-aged years (e.g., Baldie, 1976; Gordon & Chafetz, 1990). In addition, they produce only about 0.4 passives per hour in spontaneous speech before age 5;0 (Pinker, Lebeaux, & Frost, 1987), although there is some disagreement about whether this is because they cannot produce passives early or just because passives are not frequent in English, and thus, do not occur frequently in English child language. Inuktitut-speaking children, on the other hand, produce passives in spontaneous speech approximately 3 times per hour by the age of 3;6 (Allen, 1996a; Allen & Crago, 1996). In addition, they show development in their use of passives over the period between 2;0 and 3;6.

One might well wonder what factors differentiate the time of acquisition of a certain structure crosslinguistically. Interestingly, it is reported that Inuktitut-speaking children hear between three and seven times as many passive structures as English-speaking children in speech directed to them at these ages (Allen, 1996a; Allen & Crago, 1996). It is also the case that the structure of the passive is relatively unusual in terms of syntactic structures common in English, but relatively usual in terms of syntactic structures common in Inuktitut. These facts would seem to indicate caregiver input and language structure as two important factors determining differences in acquisition crosslinguistically. These two factors may well be related, as it is likely that caregivers will more frequently use structures in the input that are common and easy to produce in the target language. Similar findings have been reported for the comparison between passive acquisition in Sesotho and in English (Demuth, 1990).

At the earliest stage, Inuktitut-speaking children are primarily using basic passives with action verbs and without agentive phrases, as shown in the Examples in 17.

(17a) *Kiijautsaruarama.*
kii-jau-tsaruaq-gama
bite-PASS-might-CSV.1sS
"I might be bitten." (Elijah 2;0)

(17b) *Ilai tuttualuit aijaujuit.*
ilai tuttu-aluk-it ai-jau-juq-it
right caribou-EMPH-ABS.PL get-PASS-NOM-ABS.PL
"The caribou are being gotten, right?" (Paul 2;11)

At more advanced stages, they use an increasing number of full passives (Example 18a), passives with experiential verbs, passives with nonpatient subjects (Example 18b), and passives of internally complex transitive verb phrases.

(18a) *Ilai patittaukaintu uumunga.*
ilai patik-jau-kainnaq-juq u-munga
right slap-PASS-PAST-PAR.3sS this.one-ALL.SG
"Right, he was slapped by this one." (Louisa 3;6)

(18b) *Nasaliurtaunngitunga.*
nasaq-liuq-jau-nngit-junga
hat-make-PASS-NEG-PAR.1sS
"I am not being made a hat for." (Elijah 2;5)

These data indicate that Inuktitut-speaking children's production of passives at various levels of complexity is both earlier and more frequent than that of English-speaking children.

CAUSATIVES

There are generally assumed to be two types of causatives in languages of the world: those that are lexical and those that are expressed through either a bound or independent morpheme. Like English, Inuktitut has both of these types of causatives, as shown in Examples 19 and 20, respectively.

(19) *Jaaniup puvirtajuuq qaartanga.*
Jaani-up puvirtajuuq-θ qaaq-janga
Johnny-ERG.SG balloon-ABS.SG burst-PAR.3sS.3sO
"Johnny burst [= caused to burst] the balloon."

(20) *Jaaniup piaraq qiatitanga.*
Jaani-up piaraq-θ qia-tit-janga
Johnny-ERG.SG baby-ABS.SG cry-make-PAR.3sS.3sO
"Johnny is making the baby cry."

Inuktitut-speaking children, like English-speaking children, use lexical causatives from quite early ages, as shown in the Examples in 21.

(21a) *Una ukkualangajara.*
u-na ukkuaq-langa-jara
this.one-ABS.SG close-FUT-PAR.3sS.3sO
"I'm going to close [= make close] this one." (Lizzie 2;6)

(21b) Ataata, una aarqilauruk.
ataata u-na aarqik-lauq-guk
father this.one-ABS.SG fix-POL-IMP.2sS.3sO
"Dad, fix [= make be fixed] this one." (Paul 2;6)

In fact, approximately 6% of utterances with verbs in the speech of four Inuktitut-speaking children aged 2;0 through 3;6 contained lexical causatives (Allen, 1995, 1996a). However, it is not clear for either English- or Inuktitut-speaking children that the causative sense of these verbs has been productively acquired (Allen, 1995, 1996a; Bowerman, 1974).

Children learning both English and Inuktitut tend to start producing analytic causatives such as in Example 20 by around age 2;6. In Inuktitut, the earliest uses of analytic causatives tend to be in fixed forms involving a politeness marker and a small selection of imperative affixes, with or without a verb root. Examples such as those in 22 are typical.

(22a) *Tilauruk.*
tit-lauq-guk
CAUS-POL-IMP.2sS.3sO
"(You) make it do X." (Lizzie 2;6)
(e.g., asking father to remove her sock)

(22b) *Takutilaunnga.*
taku-tit-lauq-nnga
see-CAUS-POL-IMP.2sS.1sO
"(You) make me see." (Elijah 2;0)
(e.g., wanting to be lifted up to the window to see outside)

By slightly older ages, children begin using causative morphology in declarative structures such as those in Example 23.

(23a) *Uqrutillagu?*
uqru-tit-lagu
fall-CAUS-IMP.1sS.3sO

"Should I make it fall over?" (Elijah 2;5)
(threatening to tip over a chair that he has been rocking)

(23b) *Panik, itsivatitait.*
panik itsiva-tit-jait
daughter sit-CAUS-PAR.2sS.3sO
"Daughter, you made it sit." (Paul 3;3)
(telling his playmate that she made a doll sit down)

One of the most interesting findings about the acquisition of causatives crosslinguistically is that children in many languages tend to overgeneralize their use of the lexical causative to verbs that do not permit a lexical causative use (e.g., Bowerman, 1974). Inuktitut-speaking children also seem to do this, as indicated in Example 24.

(24) *Kutsuniarakkit.*
kutsuk-niaq-gakkit
chew.gum-FUT-CSV.1sS.2sO
"I will chew you after." [= I will make you chew after.]
(Louisa 3;3)
(offering to give her playmate some gum that she could later chew)

One child also seemed to go through a stage in which she overgeneralized the lexical causative in some instances with a certain verb root (Example 25a) and correctly produced that same verb root with a causative morpheme in other instances (Example 25b).

(25a) *Ijukkasijara.*
ijukkaq-si-jara
fall-PRES-PAR.1sS.3sO
"I'll fall it." [= "I'll make it fall."] (Louisa 3;2)

(25b) *Ijukkatilauruk.*
ijukkaq-tit-lauq-guk
fall-CAUS-POL-IMP.2sS.3sO
"(You) make it fall." (Louisa 3;2)

It is interesting to note that the use of the causative morpheme in fixed forms as well as the correct use of the causative morpheme with verb roots sometimes involved in overgeneralizations are all structures in which an imperative command is involved. By contrast, utterances in

which the causative morpheme fails to appear are not commands. These observations lead to the hypothesis that in early Inuktitut the causative morpheme is integrally related to command contexts, and that only later do children learn that the causative morpheme can be used in other contexts including declaratives and interrogatives. Such an hypothesis would explain the lexical causative overgeneralizations found in the data as instances of incorrect omission of the causative morpheme in nonimperative contexts (Allen, 1995, 1996a). Interestingly, the children at the most advanced ages in our sample are no longer using causative morphology in any imperative structures, but rather only in declarative and interrogative structures. This phenomenon is unusual in comparison with adult language, as adults do use causative morphology in imperative structures as well as other structure types. This pattern may be a result of children overcompensating for their earlier use of causatives exclusively with imperatives or may simply be an artefact of the data set.

SIGNIFICANCE OF INUKTITUT ACQUISITION RESEARCH TO LANGUAGE ACQUISITION THEORY

The information presented concerning Inuktitut language acquisition indicates that children learning Inuktitut follow a pattern of acquisition that is similar in many ways to patterns reported for the acquisition of English, the language to which it is being compared in this chapter. However, it also indicates that certain aspects of Inuktitut acquisition are different from those in English. Finally, certain patterns occur in Inuktitut that are either not relevant to or not found in English. This three-way result will likely occur with every pair of languages across which one compares acquisition patterns. However, it also reveals one of the most crucial aspects affecting the timing and patterning of language acquisition—the structure of the language in question. Much seminal work by Slobin (1973, 1982) and many others has already revealed language structure as an important influence in acquisition. Inuktitut is particularly significant in this regard, because it exhibits a number of features rare in languages on which acquisition research has been conducted. The most striking of these are rich inflection, polysyn-

thesis, and ergativity. The relevance of each of these features is described next.

As discussed, both verbal and nominal inflectional paradigms in Inuktitut are extremely rich, giving information about each of case, modality, person, and number. Inflections are also required for a wider range of elements than is typical in most languages, including both subjects and objects of verbs and both unpossessed and possessed nouns. This richness of inflection provides fertile ground for a detailed study of the acquisition of inflection in Inuktitut. Early presence of inflection could be interpreted as strong evidence for the early existence of functional categories in this language, adding to crosslinguistic evidence pointing in this direction (e.g., Deprez & Pierce, 1994; Hyams, 1992). Research on the two-morpheme stage in Inuktitut described here is a step in this direction. An additional interest about argument structure is the way in which children use verbal inflection to determine the argument structure of verbs in Inuktitut. Given the prevalent ellipsis of full NP and demonstrative overt arguments in Inuktitut, children must make much more use of inflections to determine argument structure in comparison with children learning English, for example, to the extent that they use morphosyntactic rather than semantic means to determine argument structure (Pinker, 1989). Finally, research on specific language impairment in Inuktitut indicates that verbal inflection is an area of particular vulnerability for at least one child with language impairment (Crago & Allen, 1996a).

Polysynthetic languages offer a rich and almost totally unexplored source of data relevant to language acquisition. Relatively little is known about the acquisition of word-internal morphology and even less about the effect of this type of morphological structure on the timing of acquisition of grammatical elements expressed in this way. Research on the acquisition of passives in Inuktitut indicates that polysynthetic structure may facilitate acquisition in certain ways, as passives are learned earlier in Inuktitut than in English. On the other hand, no such facilitating effect is apparent for the the acquisition of causatives. Further revealing work might be in the domain of negation or tense, both of which are primarily expressed morphologically in Inuktitut. Also of interest would be the acquisition of structures surrounding some verbs taking clausal complements which are expressed as word-internal morphemes in Inuktitut but as independent verbs in English. One might hypothesize that such verbs expressed as bound morphemes in Inuktitut may be interpreted by children differently than in languages in which hierarchical clausal structure is more visible. Finally, any polysynthetic language would provide data for research on

morpheme segmentation abilities in the language learner (Allen, 1996b; Peters, 1983, 1985). Research in Mohawk, another polysynthetic language, suggests that segmentation in that language occurs initially on a syllabic rather than morphemic basis (Mithun, 1989), although this pattern has not been observed in Inuktitut to date.

A final potential contribution of Inuktitut acquisition data is in the area of the acquisition of ergativity. Though relatively little research has been reported about the acquisition of ergative languages, such research could reveal a great deal about the way children are able to use the case system of a language to derive further information about that language. It will be intriguing to discover how children learn to group subjects and objects in ergative or accusative patterns and whether learners make revealing errors at the earliest stages. Inuktitut is particularly interesting for this, because the ergative pattern is only really visible in the nominal case system; the verbal cross-referencing inflections constitute portmanteau morphemes that reveal little of the ergative structure. To date, no research explicitly addressing the effect of ergativity on language acquisition has been undertaken in Inuktitut.

CHARTING A FUTURE COURSE

Despite the enormous social and theoretical importance of a language such as Inuktitut, the future for its acquisition is not easy to discern. Dorais (1992b) predicted that the percentage of speakers of Inuit languages in Canada would drop from 74% in 1981 to 55% in 1992. This continuing process of erosion is due to the long-term effects of second-language exposure, reduced geographic isolation, and the profound effects of second-language media. As the percentage of speakers drop, the percentage of children acquiring a language also decreases. Even if schools and institutions create strong educational language policies, these cannot correct for homes and/or daycare centers where adults cannot or do not systematically expose their preschool children to their indigenous language. There are also indications that parents in Inuit communities can be complacent and overly optimistic about the future of their language (Crago, Genesee, & Allen, 1996; Taylor & Wright, 1989).

Finally, as Arctic communities become more ethnically and linguistically mixed, there are increasing numbers of Inuit children acquiring two languages, both sequentially and simultaneously. Their acquisitional patterns and the language use patterns in their homes and communities have become important to document for both theoretical and practical purposes (Crago, Allen, et al., 1996; Crago, Genesee, et al., 1996). In some Inuit communities, code switching and code mixing become the norm among children who grow up with blended identities, both linguistically and ethnically. Language shifts such as these are a part of a complex process of cultural evolution, a process that can imply creative change as well as loss (Duranti, Ochs, & Ta'ase, 1995; Heath, 1994; Kulick, 1992). Charting a course into the next century will be challenging for speakers of the Inuit languages. Close documentation of the process should help to inform the choices to be made and the directions to be taken.

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CONTENTS

FOREWORD

This book is the third in a series of books on "Culture, Rehabilitation and Education in Culturally and Linguistically Diverse Populations." The series is the first major effort to present a comprehensive, interdisciplinary documentation of the literature on the impact of culture on rehabilitation in a variety of fields, especially in the field of communication disorders.

The series focuses on a wide array of disciplines in response to the rapidly changing environments in which health care, rehabilitation, and education are offered, particularly in the United States. Increasingly, these services are provided in an interdisciplinary manner in which professionals work in teams and in collaboration with one another to address the needs of the whole person.

On the eve of a new millennium, issues pertaining to racial, ethnic, linguistic, and cultural diversity permeate virtually all disciplines within the social, behavioral, and rehabilitation sciences, as well as the field of education. The research literature has increasingly reflected these issues, and professional practice reveals growing sensitivity to the culturally based differences and needs that often characterize humankind.

Demographic changes are often cited as the primary reason for attending to cultural matters in social science, rehabilitation, and education. These changes are real. Such factors as modern transportation, the quest for economic improvement, differences in birth rates, political realities, and social needs, among many others, have produced demonstrable changes in the make-up of the population of many nations around the world and within the 50 states of the United States.

In the United States, for example, approximately one-third of the population will be comprised of African Americans, Hispanics, Asian Americans, Native Americans, and other people of color around the turn of the century. Already upwards of 40% of the school-age population come from these groups. Indeed in some states—California and Texas—these groups will comprise the majority of the total population