ERGATIVITY AND WORD ORDER IN SAMOAN CHILD LANGUAGE

ELINOR OCHS

University of Southern California

A study of the acquisition of ergative case-marking (ECM) in Samoan indicates that it rarely appears in the speech of 2–4 year old children. It is argued that the late acquisition of ECM is caused primarily by the fact that expression of the case-marker in adult Samoan is sociolinguistically variable, with speech between household members showing the lowest frequency of expression of the case-marker. However, evidence suggests that Samoan children encode ergative distinctions through word order, in that they tend to reserve the position immediately following the verb for absolutive constituents.*

Until quite recently, acquisition studies have focussed on nominative/accusative languages, documenting the formal strategies for expressing semantic roles such as agent, experiencer, or object affected by action, and the emergence of grammatical relations such as subject, predicate, or direct object (cf. Bever 1970, Bloom 1970, 1973, Bowerman 1973, Brown 1973, Greenfield & Smith 1976). These studies assume that the grammatical relations mentioned are the endpoint of the acquisition process (adult grammars); all that is disputed is the developmental point at which children evidence knowledge of these relations (cf. Bloom 1970, McNeill 1970, Schlesinger 1974).

Ergative/absolutive languages have received considerable attention within linguistics, because they appear to violate (to varying degrees) the notion that 'subject' is a universal, basic grammatical relation (Comrie 1978, 1979, Dixon 1979, Plank 1979). In contrast to nominative/accusative languages, these languages distinguish, on the one hand, morphologically intransitive subject from transitive subject; on the other hand, they treat intransitive subject and transitive object as a single morphological category (absolutive). Ergative languages differ in the extent to which they are morphologically and syntactically ergative: many are both accusative and ergative on the morphological level, while others are 'entirely accusative at the syntactic level' (Dixon, 59).

Languages with ergative case-marking (ECM) systems represent a different model (vis-à-vis accusative languages) for a language-acquiring child. In the majority of cases, the child is exposed to a morphological system that is completely or partially ergative/absolutive, but a syntactic system that is dominantly nominative/accusative. In terms of the acquisition proces child must become competent in using two sets of grammatical distincti the morphological or syntactic level. One could reasonably predict th situation could present cognitive difficulties which are not faced by a acquiring a language with nominative/accusative case-marking.

Recently two studies of the acquisition of ECM have been completed: felin 1979 on Kaluli, and Pye 1980 on Quiché Mayan. Both these languag 'split ergative', in the sense that both ergative and accusative distinctio made on the morphological and syntactic level. The results of these s show that ECM is productively acquired before the age of three, and in as early as 27 months (Schieffelin, 293). Ergative distinctions do not a then, too difficult for a young child to acquire and express.

The present study examines the acquisition of ergative/absolutive d tions by young Samoan children. Samoan is predominantly a morpholo; ergative language, with most syntactic operations sensitive to nominati cusative distinctions (see §2 below). But unlike the acquisition studies tioned above, the present study indicates that ECM appears QUITE L Samoan child language; children between the ages of three and four u case-marking in less than 5% of the obligatory grammatical context: younger children do not use it at all.

To account for this difference in rate of acquisition, two possible s(are considered. One source concerns perceptual features of Samoan Here a comparison is made with Kaluli (for which detailed informat available) in terms of acquisition-facilitating and acquisition-delaying ph attributes (Slobin 1973, 1975, 1978). A second source concerns the so(guistic status of ECM within traditional Samoan communities. A comp; with Kaluli indicates major differences in usage patterns. The most imp of these is that the Samoan ergative case-marker is used variably—consti by social identity of speaker, and degree of social distance between sp and addressee. In particular, the case-marking is relatively rare between h hold members and other intimates.

These results should not be taken to mean that ergative/absolutive di tions are not expressed in the language of young Samoan children; th evidence that the children do make these distinctions in their use of word In the discussion to follow, word-order strategies for intransitive and tran utterances are compared, and a preference is demonstrated for reservir position immediately following the verb for absolutive constituents. results are consequential for three types of study:

(1) LANGUAGE TYPOLOGY: the Samoan materials indicate that the expre of ergative/absolutive distinctions may not only be grammatically constr in a language, but also sociologically; i.e., they may be sociolinguist variable.

(2) ACQUISITION STUDIES OF CASE-MARKING: the Samoan data show th gistral status of particular inflections is an important variable (along witl ceptual constraints) in an account of acquisition strategies.

(3) STUDIES OF INPUT: caregiver speech is seen here to form part of a larger speech register—that of Samoan intimates, particularly women.

DATA BASE

1. The data on which this analysis is based were collected in the course of a year's fieldwork (July 1978 to July 1979) in a traditional village in Western Samoa. The village, Falefā, is located on the island of Upolu, approximately 18 miles from the capital, Apia. The fieldwork was conducted by three researchers: Alessandro Duranti, Martha Platt, and Elinor Ochs. Our data collection consisted of two major projects. The first, carried out by Ochs and Platt, was a longitudinal documentation through audio- and video-tape of young children's acquisition of Samoan. This was accomplished by focusing on six children from six different households, 19–35 months old at the onset of the study. These children were observed and taped every five weeks, for approximately three hours each period. Samoan children live in compounds composed of several households; typically, numerous siblings and peers interact with a young child. We were able to record the speech of 17 other speakers, under the age of six, who were part of the focus children's early social environment. A total of 128 hours of audio and 20 hours of video recording were collected. The audio material is supplemented by handwritten notes detailing contextual features of the interactions recorded. All the audio material was transcribed in the village by a family member or acquaintance, and checked by a researcher. Approximately 18,000 pages of transcript form the child-language data base.

The second research project, conducted by Duranti, concentrated on adult–adult spontaneous language use. Forty hours of formal and informal verbal interactions were audio-taped and transcribed with the help of several native speakers. Since Samoan society is strongly hierarchical, speech of individuals from several social levels was collected: high chiefs, orators, and untitled (i.e. low-ranking) adults. Native speakers who participated in these interactions helped not only to transcribe, but also to translate and evaluate the verbal interactions documented. The primary purpose of this second project was to provide an account of spoken adult Samoan which could be compared to the spontaneous language of young Samoan children. In this way, we were able accurately to capture the 'endpoint' of the Samoan child's acquisition process, particularly the range of sociolinguistic variation characteristic of Samoan speech communities.

The present analysis of ergativity relies on a subset of the data collected during this period. Information concerning acquisition strategies is drawn from recording sessions I, III, V, and VII with six children (5 of the focus children—Matu'u, Iakopo, Pesio, Naomi, Niulala—and one older sibling, Maselino). These children were 2;1, 2;1, 2;3, 2;10, 2;11, and 3;4, respectively, at the onset of the study. Adult data are drawn from the speech of male and female family members inside the house throughout the longitudinal corpus; from women chatting to non-family members outside the house; from informal conversation among untitled, teenage boys; from informal conversation among titled men; and from highly formal discussions among titled men in village council meetings.

ERGATIVE CASE-MARKING IN SAMOAN

2. As in many ergative languages, the ergative/absolutive distinc Samoan are expressed through nominal case-marking. In Samoan, the tr subject is preceded by the particle e only when the transitive subject the verb (VSO, VOS, OVS).[1] Intransitive subjects following the verb. as all direct objects, receive zero case-marking:

(1) TRANSITIVE SENTENCE
   VSO: *Na fasi e   le tama Sina.*
        PAST hit ERG ART boy Sina'
   VOS: *Na fasi Sina e   le tama.*
        PAST hit Sina ERG ART boy
        'The boy hit Sina.'

(2) INTRANSITIVE SENTENCE
   VS: *'Olo'o   moe le tama.*
       PRES.PROG sleep ART boy
       'The boy is sleeping.'

Another restriction on the expression of ECM concerns the type of t construction used. Chung has distinguished two types of transitive c tions in Samoan. The first contains CANONICAL transitive verbs, and m subject with the ergative particle e; sample verbs are *fasi* 'hit', *av* *aumai* 'bring', *tapē* 'to kill (an animal)', *po* 'punch', *'ai* 'eat', *inu* 'dri 'kick', and *fai* 'make'. The second category of transitive construction MIDDLE verbs, e.g. *va'ai* 'see', *mana'o* 'want', *tano* 'touch', *tilotilo* ' *fa'alogologo* 'listen to', *ita* 'hate', and *alofa* 'love'. Middle verbs are ε (but not exclusively) verbs of perception, cognition, desire, and emot one outstanding exception to this grouping is *iloa* 'know', which beh; a canonical transitive verb in that its subject is marked by the ergative e. Middle verb constructions, without modification through suffixati sitive suffix), do NOT mark subjects with the ergative particle.[2] Furthe objects of canonical transitive verbs, middle verb objects are marke preceding particle *i* (if common noun), *iā* (if proper noun or pronoun)

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[1] Samoan is a predominantly verb-initial language (Greenberg 1966, Chung 1978). study (Ochs 1981) shows that VSO and VOS orders are used with almost equal freque and 36% of transitives with three full constituents). Constituents may be placed befo (e.g. SVO, OVS, OSV); but these are more marked word-orders, in the sense that a foc particle marks such preverbal NP's:

   SVO: *'O   Pesio na 'ai le mago.*
        TOPIC Pesio PAST eat ART mango
        'PESIO ate the mango.'
   OVS: *'O   le mago na 'ai e   Pesio.*
        TOPIC ART mango PAST eat ERG Pesio
        'The MANGO, Pesio ate.'

[2] In Hopper & Thompson's 1980 framework, canonical transitive clauses tend to be ch; by more features of transitivity than do middle verb constructions, e.g. expressing actic volitional, punctual, telic—whose agents are high in potency, and whose patients individuated and highly affected by the action specified. Samoan distinguishes ager constructions with the particle e.

(if pronoun):[3]

 (3) MIDDLE VERB CONSTRUCTIONS
  VSO: *E alofa le tama i lona tinā.*
    PRES love ART boy PRT his mother
  VOS: *E alofa i lona tinā le tama.*
    PRES love PRT his mother ART boy
    'A/The boy loves his mother.'

In Samoan, certain syntactic processes operate on a nominative/accusative basis, while others operate on an ergative/absolutive basis. Thus syntactic operations such as subject-to-object raising and cliticization (Anderson & Chung 1977, Chung 1978), as well as verb conjunction, fail to distinguish between intransitive and transitive subjects, just as in a nominative/accusative system:

 (4) CONSTRUCTIONS WITH SUBJECT CLITIC PRONOUNS
  Intransitive: *'Ou te alu.*
    I PRES go
    'I {am going / will go}.'
  Middle: *'Ou te fiafia i Sāmoa.*
    I PRES like PRT Samoa
    'I like Samoa.'
  Transitive: *'Ou te faia le mea sa'o.*
    I PRES do ART thing right
    'I (will) do the right thing.'
 (5) SUBJECT-TO-OBJECT RAISING
  Intransitive
  subject: *'Ou te mana'o iā Sefo e alu vave.*
    I PRES want PRT Sefo to go quick
    'I want Sefo to go quickly.'
  Transitive
  subject: *'Ou te mana'o iā Sefo e fa'afou la'u uati.*
    I PRES want PRT Sefo to repair my watch
    'I want Sefo to repair my watch.'
 (6) VERB CONJUNCTION
  Intransitive and transitive verb:
    La e ō ma 'a'ai le suka.
    they(DU) PRES go(PL) and eat(PL) ART sugar
    'They are going and eating the sugar;
     They are eating the sugar while they are going.'

Other processes, however, distinguish ergative from absolutive constituents:

 (7) NOMINALIZATIONS
  Intransitive: *le o'o mai o 'oulua*
    ART arriving DEIC GEN you(DU)
    'your (two) arriving'

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[3] The preposition *i* in Samoan also marks temporal or spatial location, instrumentality, and comparison (Milner 1966, Tuitele et al. 1978, Tuitele & Kneubuhl 1978). Tuitele et al. treat middle verbs as intransitives, based on the uses of *i* specified above.

  Transitive: *le faiga e 'oulua*
    ART doing ERG you(DU)
    'your (two) doing'

SOCIOLOGICAL CONSTRAINTS ON ERGATIVITY IN SAMOAN

3. While much has been written on the morphological and syntactic s‹ of ergativity across languages, little is known about the sociological scoɼ ergative morpho-syntax within a language—i.e., about the extent to w speakers distinguish ergative from absolutive, and the extent to which u: the case-marking is sensitive to variation in social context (cf. Gumperz I 1977, Hymes 1967, 1974, Labov 1963, 1966, 1972).

A study of adult Samoan speech across several socially significant con† indicates that the ergative nominal case-marker *e* is used variably across t contexts. The use of the marker is sensitive to the social distance obtaⁱ between speaker and hearer and to sex of speaker. The range of variatiⁱ the use of ECM in transitive clauses by adult Samoans is presented in ⊺ 1, in which five different social situations are represented.

SITUATION	AGENTS EXPRESSED IN TOTAL CORPUS	POSTVERBAL AGENTS EXPRESSED IN TOTAL CORPUS	ERGATIVE CASE-MARKERS IN TOTAL CORPUS	ERGATIVE C MARKERS UTTERANC WITH POSTVERB AGENT:
I: Informal, women to female adults and children, family members (150 total clauses)	40.0% (60)	20.0% (30)	4.0% (6)	20.0% ⟨
II: Informal, men to female/ male adults and children, family members (60 total clauses)	40.0% (24)	30.0% (18)	5.0% (3)	16.6% ⟨
III: Informal, women to female adults, non-family members (120 total clauses)	52.5% (63)	29.2% (35)	13.3% (16)	45.7% (I
IV: Informal, men to male adults, non-family members (50 total clauses)	40.0% (20)	32.0% (16)	24.0% (12)	75.0% (I
V: Formal, titled men in discussion portion of village council meetings (56 total clauses)	55.3% (31)	39.3% (22)	28.6% (16)	72.3% (I

TABLE 1.

In SITUATION I, women of the same extended family are talking to one anɗ and to their children within the household compound. In SITUATION II, are speaking to both male and female family members, adult and child. In t two situations, speech to child was not distinguished from speech to anɗ adult—because, first, many persons were participating in the interactions.

second, assertions are typically not directed to one particular addressee, but rather to the participants as a group. In this sense, assertions differ from directives, which are typically addressed to a single recipient and often preceded by a vocative. Many fewer utterances of men (vs. women) inside households were collected, because men do not spend much of their time in this context: rather, they spend most of their waking hours working on the plantation or in the capital, participating in formal gatherings of titled men within the village, or relaxing with their village peers. The data used here are drawn primarily from those men who stopped by their houses unexpectedly to report an incident, who were ill and not able to work, or who were passing by between tasks.

Two other situations are more representative of men's speech. SITUATION IV is that of relaxed informal talk among male peers (outside the family); it includes both untitled men's speech and titled men's speech. SITUATION V takes place in the highly formal village councils, in which only titled persons can participate. In this sample, only titled men were participants. The data are drawn not from the more conventionalized oratory (*lāuga*) within these meetings, but rather from the discussions (*talanoaga*) that follow the oratory (Duranti 1980). These data are drawn from a larger analysis by Duranti 1981 of word-order and case-marking in these social situations.

SITUATION III contrasts with the others in that it displays informal women's speech to non-family members. The data are drawn from a group of village women who are seated outside, picking weeds on the compound of their pastor, and gossiping with each other.

What do these data indicate? There are two important patterns of variation. The first is that a major difference exists in percentage of ECM in speech of FAMILY MEMBERS as compared with NON-FAMILY MEMBERS. ECM rarely appears when speakers are addressing members of their own household. Of the entire corpus of canonical transitive assertions and yes–no questions in these contexts, women used the case-marking 4% of the time and men 5%. In those environments in which formal speech would require ECM (i.e. where a postverbal agent is expressed), women used the marking 20% of the time and men 16.6%. These percentages contrast with those characteristic of case-marking in speech to non-family members. Women's speech to non-family members shows more than twice the percentage (45.7%) of ECM in postverbal environments; men's speech to non-family members shows nearly five times the percentage of ECM (75%, 72.3%) in postverbal environments.

From these data, we can infer that social distance between speaker and audience is an important constraint on the use of ECM. The greater the social distance, the more likely it is that a speaker will use the marking.

A second important pattern of variation is linked to sex of speaker. While both men and women exhibit low frequencies of usage of ECM in intimate settings, MEN appear to use the marking a much higher percentage of the time in NON-INTIMATE contexts. In the intimate settings, men and women do not show much difference in their percentage of use of ECM in postverbal environments: men, 16.6%; women, 20%. But in informal speech to non-family

members, there is a large gap between the two groups of speakers: men women, 45.7%.[4]

Instances in which speakers omit the ergative case-marker are illustr: examples 8–9 below:[5]

(8) Women's speech in household (Niulala; his mother, M; mother's sister, S)

CONTEXT	CHILD	ADULTS
Niulala, ♂, 3;7, goes out of house.		M: *Niulala, sau i!* Niulala come hei 'Niulala, come (to S) *Kago mai* touch bring 'Get him and b· here.'
S follows N out.	N: *le ke– le alu* NEG TENSE NEG go *koe fo'i maill* again return *i/* here 'I'm not going, I'm coming back here.'	S: *Illa savali kogu* okay walk insid· *fale ma pisa.* house for noise 'Okay, go insid· house becaus· you're makin; rumpus.'
((whines))		*Sau loa.* come now 'Come now.' *Ia 'ai loa* okay eat now *Ko'oko'o falaoa.* Ko'oko'o bread 'Okay, Ko'oko'· going to eat (· bread now.'

(9) Women's speech in household (Pesio; her grandmother, Sau)

CONTEXT	CHILD	ADULT
Pesio, ♀, 2;3, puts plate of rice by back edge of house and begins to eat. Nike, 3, goes to P holding a cat. P cries. N cries. P goes to Sau, who has witnessed this event. S wipes P's tears and nose.		

S: *'Uma loa.*
finish now
'It's finished now.'
'Uma loa.
'It's finished now.'
'Uma loa.
'It's finished now.'
'O le ā?
TOPIC ART what
'What is it?'
'O le ā?
'What is it?'
'O le ā?
'What is it?'

P: *'uma 'ai aul*
finish bite me
'It bit me.'

S: *'Ua 'ai oe.* (pause)
TENSE bite you
'It has just bitten you'.
'Ua 'ai oe le ←
TENSE bite you ART
pusi?
cat
'The cat has just bitten you?'
'Ua fela'u oe ←
TENSE scratch you
le pusi.
ART cat
'The cat has just scratched you?'
'Ua fela'u oe le pusi. ←
'The cat has just scratched you?'
((soft))
Ia 'uma loa.
PRT finish now
'Okay, it's finished now.'
Ia 'uma loa.
'Okay, it's finished now.'
Ia 'uma loa.
'Okay, it's finished now.'

ERGATIVITY AND WORD ORDER IN SAMOAN CHILD LANGUAGE

Examples 10–13 illustrate the use of the ergative marker in spontan adult speech (see fn. 5, above):

(10) Young men talking about boy, Pegi, who was put in jail.
  T: *... auā   faimai ua   falepuipui lesi   kama.*
      because say TENSE put in jail the other boy
      'because they say the other boy has been put in jail.'
      Loka. Pegi.
      locked Pegi
      'Locked up. Pegi.'
  S: *Oi.*
      'Oh.'
  T: *Ke   iloa   Pegi?*
      TENSE know Pegi
      'Do you know Pegi?'
  S: *Ke   iloa   Pegi.*
      TENSE know Pegi
      'I know Pegi.'
      Aiseā?
      'Why?'
      (1.0)
  T: *O   le   sala le   ka'avale.*
      TOPIC ART fine the truck
      'It was because of the fine of the truck.'
      Ia 'ua   koe   kakala e   Siegi ma– ma Ulusese ...
      PRT TENSE again release ERG Siegi and– and Ulusese
      'Now Siegi and Ulusese have just released him.'

(11) Young men talking about Dracula film, which only T has seen.
  T: *Leaga leaga le   amio   o le   kama, sole.*
      bad   bad the character of ART guy   brother
      'The character of the guy is bad bad, brother.'
      Gai   keige, sole.
      poor dear girls brother
      'Poor dear girls, brother.'
  S: *'Ai   e   le   kama a?*
      bite ERG ART guy   right
      'The guy bit them, right?'

(12) *Fono* 'meeting' in the village, about the elections.
  M: *soli   e   Lufilufi le kakou   mavaega.*
      violate ERG Lufilufi ART our(INCL.PL) promise
      'Lufilufi violated our promise.'

(13) *Fono* of April 7, 1979; third speech of the day.
  F: *Ia. O   gei   lava aso   uma o   aso   uma a   ga   fa'apa'ia e   leova.*
      PRT TOPIC these very days all TOPIC days all PRT TENSE blessed ERG Jehovah
      'So. All these very days, ALL these days, were blessed by Jehovah.'

ACQUISITION OF THE ERGATIVE CASE-MARKING SYSTEM

4.1. RESULTS. The most significant finding of the longitudinal study i Samoan children between the ages of two and four rarely use the er marker *e* in their spontaneous speech. The frequency with which this m appears in canonical transitives of the five sample children is display Table 2 (overleaf).

This shows that the youngest children—Matu'u, Iakopo, and Pe never used ECM. The older children, Naomi and Niulala, used the infl

CHILD/AGE AT ONSET OF STUDY	AGENTS EXPRESSED IN TOTAL CORPUS	POSTVERBAL AGENTS EXPRESSED IN TOTAL CORPUS	ERGATIVE CASE-MARKERS IN TOTAL CORPUS	ERGATIVE CASE-MARKERS IN UTTERANCES WITH POSTVERBAL AGENTS
Matu'u/2;1 (76 total clauses)	22.4% (17)	14.5% (11)	0.0% (0)	0.0% (0)
Iakopo/2;1 (50 total clauses)	30.0% (15)	12.0% (6)	0.0% (0)	0.0% (0)
Pesio/2;3 (113 total clauses)	13.3% (15)	4.4% (5)	0.0% (0)	0.0% (0)
Naomi/2;10 (109 total clauses)	15.6% (17)	10.1% (11)	0.9% (1)*	9.1% (1)*
Niulala/2;11 (148 total clauses)	21.6% (32)	13.5% (20)	0.7% (1)	5.0% (1)
Maselino/3;4 (86 total clauses)	36.0% (31)	33.7% (29)	4.6% (4)	13.8% (4)

TABLE 2. (The item marked with an asterisk is a partial repetition of adult speech.)

in one utterance each, representing .9% and .7% respectively of their total canonical transitives (cf. 10.1% and 13.5% respectively of their transitives with postverbal agents). These extremely low percentages led me to examine the speech of an older sibling, Maselino, who was not one of the 'focal' children in the study, and was present only intermittently throughout the recording sessions. The percentage of ECM was higher in his speech: 4.6% of the total canonical transitives (cf. 33.7% of those with postverbal agents). However, these figures are still extremely low, and provide no evidence that ECM is part of his productive competence.

An example in which the ergative case-marker *e* is both omitted and expressed is the following:

(14) Niulala, ♂, 3;4

CONTEXT
N has noticed and talked about tractor
  moving along road. He then begins to
  scare and threaten the others present.

CHILD

N: *sua   okou/*
strike down you(PL)
  'It's going to strike you down.'
sua   okou e   makou   loli/ ←
strike down you ERG our(EXCL) truck
  'Our truck is going to strike you down.'
sua   okou makou   loli fou/ ←
strike down you our(EXCL) truck new
  'Our new truck is going to strike you down.'

Examples 15–17 illustrate further instances in which children use the ergative case-marker:

(15) Naomi, ♀, 2;11, with mother

CONTEXT   CHILD   ADULT
N hits mother, asks where
  her mango is.

N: *ikae uma magol*
shit finish mango
  'Shit, the mango is
    finished.'
uma mago a'u/
finish mango my

'My mango is
  finished.'
tae tae uma magol
shit shit finish mango
  'Shit, shit, the
    mango is
    finished.'
uma mago a'u/
  'My mango is
    finished.'
uma ail
finish eat
  'The eating is
    finished.'

                          M: *Ai e   ai?*
                          eat ERG who
                            'Who ate it?'
(?)/
                          Fea?
                            'Where?'
umal
finish
  'Finished.'
ai e   oel
eat ERG you
  'You ate it.'

(16) Maselino, ♂, 3;8; Pesio's father; Paula (female caregiver); Elenoa.

CONTEXT   CHILD   ADULTS
Pesio, 2;7, is crying, looking
  at her father. Another
  child, Kala, has hit her,
  though this has not been
  mentioned. Her father
  wants her to stop crying.

                          F: ((soft)
                          (*Alu loa*)/
                            'Go now.'
                          P: *Pesio/*
M: *fasi/l (e)   Kala/*
hit   (ERG) Kala
  'Kala hit her.'
                          E: //*Kala/*
M: *fasi e Kala/*
  'Kala hit her.'

(17) Maselino, 3;6.

CONTEXT   CHILD
M decides to scare another child, Gike, by
  using a common scare expression about a
  mother's absence.

                          M: *Gike! Gike! le   ua   ai e   le*
                                       DEIC TENSE eat ERG AR
                          pua'a Koe/
                          pig   Koe
                            'Gike! Gike! Now the pig ate K
                            [Gike's mother]

fiu   e   suel
tired COMP search
   'They are tired of searching.'
fiu   e   kue   akul
tired COMP search DEIC
   'They are tired of searching around.'
   [*kue* is a phonological error.]
le   ua   ai   e   le   pua'al   ←
DEIC TENSE eat ERG ART pig
   'Now the pig ate her.'
le   ua   ai   e   le   povi Gikel   ←
DEIC TENSE eat ERG ART cow Gike
   'Now the cow ate her, Gike.'
                :
ua   ai   e   le   povi a   Koel   ←
TENSE eat ERG ART cow PRT Koe
   'The cow ate Koe.'

4.2. Discussion of results. Several factors could account for the infrequency of the ergative particle *e* in the speech of young Samoan children.[6]

4.21. Expression of agents as major constituents. Table 2 shows that these results are linked to the low frequency of agents expressed in transitive assertions and yes–no questions. However, this does not explain why the case-marker is not used when agents ARE expressed postverbally as major constituents. Young children appear to use constructions in which ECM would be required (according to speakers' judgments of 'good Samoan', *tautala lelei*); yet they do not use the case-marking.

4.22. Perceptual characteristics of ergative case-marking. Another possible determinant for the low usage of the ergative case-marker in children's speech concerns the perceptual saliency of the marker in Samoan. Slobin 1973, 1975, 1978 has argued that the acquisition of grammatical morphemes is sensitive to whether or not the morphological items are postposed, syllabic, stressed, obligatory, tied to the noun, consistent with word-order patterns, rationally ordered, non-synthetic, used exclusively for grammatical (vs. pragmatic) functions, regular, consistently applied to all pro-forms, and distinct (i.e. with no homonymous functors; Slobin 1978:18). If the morphological system of a language is characterized by the presence of these features, children find no difficulty in acquiring it, and do not (for example) prefer word order as an initial strategy for encoding semantic roles. A system of grammatical morphemes which displays these features, such as that of Turkish, is acquired more quickly than one which does not, such as that of Serbo-Croatian. Nonetheless, Slobin argues, these morphological systems are all usually learned during the preschool period; and Turkish children are competent 'at the two-word period, before the age of two.'

[6] A list of canonical transitive verb types used by each child in each session is listed in the Appendix. As can be seen, children use a wide range of such verbs. Those verbs whose agents received the nominal ergative marker are followed by ERG. These verbs are so few in number that no generalizations can be made (for the use of the case-marker) based on semantic properties of verbs.

The ergative particle in Samoan has a number of perceptually distre characteristics (in terms of Slobin's list), being characterized by only fo the twelve features of perceptual saliency: it is syllabic, consistent with v order patterns, regular, and has no homonymous case-marker. This fact certainly affect the acquisition of the case-marker by Samoan children. I ever, if we examine features of Kaluli case-marking, acquired much e: than that of Samoan, we find that it too lacks many acquisition-facilit features: Table 3 shows that, like Samoan, it is characterized by only fo these features.

FEATURE	SAMOAN	KALULI
postposed	–	+
syllabic	+	+
stressed	–	?
obligatory	–	–
tied to noun	–	+
rationally ordered	n.a.	n.a.
consistent with word-order pattern	+	+
non-synthetic	n.a.	n.a.
only grammatical functions	–	–
regular	+	–
applied to all pro-forms	–	–
no homonymous case-markers	+	–

TABLE 3. (The question mark opposite 'stressed' for Kaluli reflects the fact that the prosod system of this tone language has not been worked out.)

In both languages, the ergative marker is non-obligatory, in that it is su to morpho-syntactic constraints. As noted, in Samoan, ERG appears onl transitive subjects that follow the verb; in Kaluli, it appears only whei transitive subject immediately precedes the verb (OAV). In Samoan. marker appears on all pro-forms except clitics (and these always appear b the verb). In Kaluli, the restriction is much more severe, in that no per; pronoun can be marked with ERG; the marker appears only with full noun; demonstratives. Further, unlike Samoan, Kaluli has homonymous case-n ers: the ERG particle is also used to mark the genitive and instrumental c;

With the knowledge that Kaluli ergative-marking is acquired earlier than of Samoan, it would be plausible to infer that the acquisition-facilitating fea: that distinguish Kaluli from Samoan have a greater impact than those distinguish Samoan from Kaluli. That the ergative marker is postposed tied to the noun in Kaluli, while the Samoan marker is preposed, and ; pendent of the noun, may account for the differential rates of acquisitioi tween these two groups of children.[7]

[7] Whether or not the morphological marker *e* should be considered a lexical item, distinct the noun that follows, is a relatively difficult issue—as is generally the case with unstr morphemes in languages. As partial evidence of its independent nature, it may be noted that I modifiers of the agent noun can appear between the particle *e* and the noun:

Na   fa'a'ai e   lenei 'āiga   le   nu'u.
PAST feed   ERG this   family ART village
   'This family fed the village.'

4.23. SOCIOLINGUISTIC CHARACTERISTICS OF ERGATIVE CASE-MARKING. However, one of the most important differences between Kaluli and Samoan case-marking concerns the feature 'obligatory'. This difference is not captured in Table 3, in which both case-markers are characterized as 'non-obligatory'. Rather, the difference is in the nature of the restriction which constrains the use of the ergative marker in each language. Kaluli and Samoan both impose syntactic and semantic constraints on the appearance of ECM: in this sense, ERG is sometimes present in both languages. However, Samoan and Kaluli differ in the extent to which the case-marking is used, given that the appropriate grammatical conditions are met.

As discussed in §3, the use of ECM is situationally restricted in adult Samoan; it is used more by men than by women, and is more frequent in speech to non-family members than in speech among household intimates. If we relate this to Samoan child language, we can see that ECM is statistically most 'salient' to Samoan children in those environments to which the child is least exposed. Children up to the age of 3–3:6 spend nearly all their time within the household compound. The large bulk of discourses to which they are exposed are those between family members. Further, as noted above, it is women rather than men who spend time in the house during daylight hours; thus it is women's speech that provides the primary adult input to the language-acquiring Samoan child. The primary reason that children do not acquire the ECM system rapidly is that it is not characteristic of the speech behavior of those around them.

The use of the ergative case-marker in Kaluli, by contrast, is not constrained by the social status of the speaker, nor by the social relationship between speaker and others present. When the transitive subject appears immediately before the verb (OAV) and meets the necessary semantic criteria, Kaluli speakers must and do use ERG. Pye has also noted that Quiché Mayan speakers use the ergative case-marker with relatively high frequency.

The difference in the sociolinguistic status of the ergative marker between Samoan, on the one hand, and Kaluli and Quiché Mayan, on the other, provides an important source for understanding why Samoan children use the ergative case-marker less frequently, and later in developmental time.

ERGATIVE DISTINCTIONS THROUGH WORD ORDER

5. The results of the acquisition study should not be taken as conclusive evidence that the speech of young Samoan children is not sensitive to ergative/ absolutive distinctions. A study of word-order strategies over developmental time supports the notion that ergative/absolutive distinctions ARE expressed by 2–4-year-old Samoan children. The most important finding of the word-order study is that young children tend to reserve the location IMMEDIATELY FOL-LOWING THE VERB for absolutive constituents (transitive patients and intransitive major arguments); they disprefer ergative constituents (agents) in this position. This pattern is displayed in Tables 4–12. The data on which these tables are based are all spontaneous utterances of young children (i.e. non-repetitions of others' prior speech). Further, these tables represent only novel utterances of children; exact repetitions of a child's own prior utterances are excluded. In

this sense, the tables illustrate strategies employed by young childre[ ]ducing different types (vs. tokens of the same and different type) of int[ ]and transitive constructions.

	SESSION I	SESSION III	SESSION V	SESSION VII	AVERA
Matu'u	100.0% (9)	70.0% (7)	84.6% (21)	71.4% (20)	81.5%
Iakopo	100.0% (1)	85.7% (6)	85.7% (18)	85.2% (23)	89.2%
Pesio	96.1% (25)	80.0% (4)	78.9% (30)	86.5% (45)	85.4%
Naomi	100.0% (16)	70.6% (12)	91.3% (22)	75.8% (25)	84.4%
Niulala	90.9% (30)	77.3% (34)	88.9% (64)	65.8% (25)	80.7%

TABLE 4.

Table 4 summarizes word-order strategies of Samoan children in p[ ]intransitive utterances containing a major argument. The table does no[ ]major arguments expressed as clitic pronouns, given that the order o[ ]clitic pronouns in adult Samoan is fixed in preverbal position (cf. fn. 1[ ]The table indicates the frequency with which children place the major a[ ]after the intransitive verb (VS order). As can be seen, there is a str[ ]erence for this word order. This is true particularly in the earliest[ ](Session I), where 90–100% of intransitive major arguments appear[ ]verbal position.

These data are compared, in the following tables, to word-order pre[ ]in canonical transitive utterances containing both an expressed agent[ ]patient (O). As in Table 4, these tables do not represent utterances c[ ]clitic pronouns. They illustrate word-order strategies in canonical tr[ ]with agents and patients expressed as full NP's, because these con[ ]may appear in a range of positions with relation to each other an[ ]transitive verb (VOA, VAO, AVO etc.) The question which these table[ ]is: 'In utterances in which both an agent and a patient are expressed,[ ]the preferred orders for encoding these roles?'

Table 5 shows the percentages and frequencies of each word ord[ ]speech of the young children in our study. (The heading O[VA] in[ ]column here and below indicates that a relative clause followed the O[ ]6–10 specify for each child the frequencies of different word orders[ ]recording session. These tables indicate a strong preference for VOA[ ]52.3%) and AVO (average 29.8%) word orders, and a dispreference [ ](average 11.3%) and other orders in which agent is expressed after t[ ]Only Niulala, the oldest child in the study, displays no strong prefer[ ]certain orders over others.

	TOTAL	VOA	AVO	OAV	AOV	VAO	OVA
Matu'u	43	53.5% (23)	32.6% (14)	–	–	7.0% (3)	2.3% (1)
Iakopo	19	52.6% (10)	42.1% (8)	5.3% (1)	–	–	–
Pesio	23	69.5% (16)	17.4% (4)	–	4.4% (1)	8.7% (2)	–
Naomi	26	65.4% (17)	23.1% (6)	–	–	11.5% (3)	–
Niulala	40	32.5% (13)	32.5% (13)	–	–	22.5% (9)	10.0% (4)
TOTALS	151	52.3% (79)	29.8% (45)	.7% (1)	.7% (1)	11.3% (17)	3.3% (5)

TABLE 5.

SESSION	TOTAL	VOA	AVO	OAV	VAO	OVA	O[VA]
I	2	1	1	–	–	–	–
II	4	–	4	–	–	–	–
III	8	5	2	–	–	–	–
IV	4	3	–	–	1	–	1
V	7	6	–	–	–	–	1
VI	7	3	4	–	–	–	–
VII	3	–	1	–	1	1	–
VIII	8	5	2	–	1	–	–
TOTALS	43	23	14	–	3	1	2

TABLE 6. Matu'u.

SESSION	TOTAL	VOA	AVO	OAV	VAO	OVA	O[VA]
I	–	–	–	–	–	–	–
II	–	–	–	–	–	–	–
III	–	–	–	–	–	–	–
IV	3	1	2	–	–	–	–
V	4	2	2	–	–	–	–
VI	3	2	1	–	–	–	–
VII	9	5	3	1	–	–	–
TOTALS	19	10	8	1	–	–	–

TABLE 7. Iakopo (only seven sessions were held with this child).

SESSION	TOTAL	VOA	AVO	OAV	VAO	OVA	O[VA]
I	1	1	–	–	–	–	–
II	8	5	2	–	1	–	–
III	2	1	–	1	–	–	–
IV	3	1	2	–	–	–	–
V	1	1	–	–	–	–	–
VI	6	6	–	–	–	–	–
VII	2	1	–	–	1	–	–
TOTALS	23	16	4	1	2	–	–

TABLE 8. Pesio (7 sessions only).

SESSION	TOTAL	VOA	AVO	OAV	VAO	OVA	O[VA]
I	1	–	–	–	1	–	–
II	5	2	3	–	–	–	–
III	1	–	1	–	–	–	–
IV	6	5	1	–	–	–	–
V	1	–	1	–	–	–	–
VI	4	4	–	–	–	–	–
VII	0	–	–	–	–	–	–
VIII	8	6	–	–	2	–	–
TOTALS	26	17	6	–	3	–	–

TABLE 9. Naomi.

SESSION	TOTAL	VOA	AVO	OAV	VAO	OVA	O[VA]
I	3	–	1	–	2	–	–
II	10	4	4	–	1	1	–
III	1	–	–	–	1	–	–
IV	7	–	5	–	1	–	1
V	9	5	–	–	2	2	–
VI	3	2	1	–	–	–	–
VII	1	–	–	–	1	–	–
VIII	6	2	2	–	1	1	–
TOTALS	40	13	13	–	9	4	1

TABLE 10. Niulala.

Table 11 focuses on the position of patient NP's. It shows how fre these constituents appear immediately following the verb, so that a con can be made with the position of major arguments of intransitive verb 11 summarizes this information for each session and for each child. It with the exception again of Niulala, a strong tendency to place patie right after the verb.[8]

Matu'u	86.0% (37)
Iakopo	94.7% (18)
Pesio	91.3% (20)
Naomi	88.5% (23)
Niulala	65.0% (26)

TABLE 11.

These word-order results have implications beyond the expression of relations. In particular, they indicate that what has been considere basic word order of Samoan, namely verb–subject–object (Greenbei is NOT DEVELOPMENTALLY BASIC. This word order is relatively late to and does not account for the majority of utterances in which agent an are both expressed. These results confirm the hypotheses of Lehma and of Slobin, that the verb and patient form a 'perceptual Gestalt whic interruption' (Slobin 1975:13). Slobin would predict that such a wo (VSO) would not be initially acquired by young children, and this is b by the Samoan data. Young Samoan children prefer to keep the v patient sequentially contingent, placing the agent either before or a unit.

[8] A reader has suggested that young Samoan children may be reserving the immediate position for pronouns (rather than for absolutive constituents). A count of the number and pronominal patients appearing immediately after the verb in the canonical transit indicates that this is not true. The patient NP's in VOA and AVO canonical transitives predominantly NOUNS rather than pronouns, as the table below indicates.

	TOTAL	NOMINAL	PRONOMINAL
Matu'u	37	30	7
Iakopo	18	13	5
Pesio	20	17	3
Naomi	23	16	7
Niulala	26	14	12
TOTALS	124	90	34

It has been suggested by a reader that the children's word-order data allow a second interpretation, in which children have an encoding strategy which orders predicates and subjects—rather than verbs, absolutives, and ergative constituents. The ordering strategy places predicates before subjects; see Figure 1.

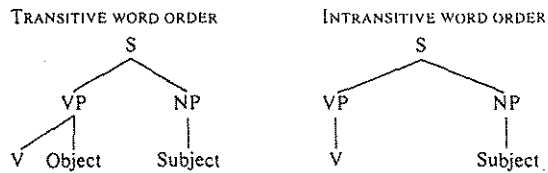TRANSITIVE WORD ORDER   INTRANSITIVE WORD ORDER

FIGURE 1.

As noted earlier, the data do suggest that the children treat transitive verb and patient NP as a unit, in that they disprefer VAO constructions—i.e. constructions in which a major constituent interrupts the predicate. This dispreference is not limited to children's speech. Research on adult word-order (Ochs, MS) indicates that Samoan adults also show a preference for placing transitive verb and object next to each other. Tables 12–14 show that this preference is strongest in the speech of women and in that of household members, the primary sociolinguistic environment of the young child.

SITUATION	TOTAL	VAO	VOA	AVO	OVA
I	23	21.7% (5)	34.8% (8)	34.7% (8)	8.7% (2)
II	15	26.7% (4)	66.7% (10)	–	6.6% (1)
III	14	28.6% (4)	35.7% (5)	28.6% (4)	7.1% (1)
IV	6	66.7% (4)	16.7% (1)	16.6% (1)	–
V	17	52.9% (9)	17.6% (3)	11.8% (2)	17.6% (3)
TOTALS	75	34.7% (26)	36.0% (27)	20.0% (15)	9.3% (7)

TABLE 12. Word-order preferences: canonical transitives with three full constituents. (Situations are defined as in Table 1, above.)

	TOTAL UTTERANCES	VAO	VOA	AVO	OVA
Men	38	44.7% (17)	36.8% (14)	7.9% (3)	10.5% (4)
Women	37	24.3% (9)	35.1% (13)	32.4% (12)	8.1% (3)

TABLE 13. Word-order preferences and sex of speaker.

	TOTAL UTTERANCES	VAO	VOA	AVO	OVA
SPEAKING IN	38	23.7% (9)	47.4% (18)	21.0% (8)	7.9% (3)
SPEAKING OUT	37	45.9% (17)	24.3% (9)	18.9% (7)	10.8% (4)*

TABLE 14. Word-order preferences: speech to family vs. non-family. (The asterisk marks a rough figure.)

However, the children's word-order patterns offer no evidence for a unified category 'subject' that collapses major arguments of intransitive verbs and agents of transitive verbs. The argument for their use of syntactic subject as

a category would rest on a parallel between transitive VOA word-orde intransitive verb + major argument word-order. However, the data d support such a parallel. As Tables 4 and 5 indicate, agent NP's appear the predicate (VO) in only 52.3% (average) of the corpus, whereas maj guments follow the intransitive predicate in 83.8% (average) of the co That is, major arguments appear after the verb approximately one and times as often as agent NP's. In contrast, the percentage (for intransitive arguments) matches closely that for patient NP's that appear in the same order position (average 82.1%).

To summarize, the children's speech data suggest that ergative relatio expressed in the early stages of Samoan language acquisition. They a pressed through word order rather than through case-marking. These r are paralleled in Goldin-Meadow 1975, who found that deaf children used order to distinguish causative agents from both patients and intransitive en These results are also consistent with a number of findings in the child-lan literature that show children relying on word order as an initial strate; expressing semantic relations (Bever 1970, Bloom 1970, Radulović 197 cf. Slobin 1978). Finally, the particular word-order pattern relied upon by Samoan children preserves the verb–patient predicate as a coherent uni porting Slobin's claim that interruption of the predicate is percep distressful.

IMPLICATIONS

6.1. ACQUISITION OF MORPHOLOGY. This study indicates that, in ass why particular morphological features are acquired when they are, resea need to consider their social salience. In Samoan ECM, perceptual fac e.g. the fact that the ergative particle *e* appears before the agent, rath postpositionally—enter into the acquisition process. However, such per characteristics of morphological features are relevant only to the exte the features themselves are actually in use in the speech environment language-acquiring child. If two languages under comparison share s sociolinguistic and grammatical constraints on the expression of ECM differences in other perceptual characteristics of the marking in each la play a very important role in accounting for acquisition patterns. Ho where significant DIFFERENCES exist in environments and frequency these will emerge as the significant factors influencing the time when will productively use the case-marking. In comparing Samoan and Ka quisition patterns, the fact that ECM is sociologically constrained in S mature speech, but not in Kaluli, best explains why Samoan children the marking later than Kaluli children.

6.2. CAREGIVER REGISTER. In the past fifteen years, there has been erable interest in the speech of those providing care for the language-ac child. This interest has led to a number of studies that have isolated guishing features of caregiver speech (Andersen 1977, Brown et al. 197 den 1965, 1972, Cross 1975, 1977, 1978, Ferguson 1964, 1977, Newpo and Snow 1972). A major motivation for these studies has been the se;

features that may facilitate the language-acquiring process. Recently, some researchers (e.g. Ferguson 1977 and Andersen 1977) have regarded caregiver speech as a social phenomenon—treating it as part of a set of speech varieties, called REGISTERS (Ellis & Ure 1969), available to speakers of a particular language. These registers are varieties that are sensitive to contexts of USE (cf. Andersen). Caregiver register can then be placed alongside others (doctor–patient register, teacher talk, foreigner talk, lawyer talk) that may exist in a language.

Research into register variation within a language is still in its infancy. Only a handful of registers have been described for any one language; the bulk of these descriptions are based on English. However, one often studied is caregiver register or 'baby talk'. We know very little at present about the relationships between particular registers—which features are shared, to what extent, and why, though Ferguson and Andersen have been pursuing this last question. Ferguson has discussed features shared by caregiver and foreigner talk, e.g., and has posited processes that account for their similarities (e.g. simplification processes). Andersen has discussed the effects of superior status and sex of speakers that run through several registers in English, e.g. nurse talk and mothers' talk as compared with doctor talk and fathers' talk.

Despite this recent research, little attention has been paid in the developmental psycholinguistic literature to the social status of caregiver speech. Psychologists carrying out research on language acquisition do not, by and large, compare language addressed to children with the range of language used in recurrent social situations within a particular community. Typically, in isolating features of caregiver speech, the researcher compares caregiver speech to the child with caregiver speech to the researcher (e.g. Garnica 1977, Newport 1976). This comparison focuses only on the status of the researcher as a member of the same generation as the caregiver, and the child as a member of the next lower generation.

From a sociological perspective, such a comparison has major flaws. In particular, it fails to consider other relevant characteristics of the social relationships under analysis. The researcher may be of the same generation (an adult); but the researcher is not typically an intimate of the caregiver. The child may be of a lower generation than the caregiver, but they share an intimate relationship. Thus it becomes difficult to sort out whether differences that exist between caregiver–researcher and caregiver–child speech are functions of age/maturity factors, or of social-distance (intimacy) factors, or of both. To distinguish these effects, the analysis should minimally compare language among intimates of the same generation with language of intimates across generations (intimate adult–child relationships), and language of non-intimates of the same generation with language of non-intimates across generations (non-intimate adult–child relationships).

In the case of Samoan, the low frequency of ECM in the speech of women to children is NOT a defining feature of caregiver register. It is not a feature exclusive to adult–child communicative contexts. Rather, it is a feature that characterizes the language used between family members in relatively casual moments at home. The language of adult family-member to child family-mem-

ber is part of a larger 'household register'. INTIMACY rather than g the significant constraint on the use of ECM in Samoan. Similar in frequency of use is not a function of same-generation status betw and hearer; it is a function of increased social distance, on the on male status of the speaker, on the other. That is, in speech to a member, ECM is far more frequent in the speech of men than in tha

6.3. TYPOLOGY OF ERGATIVE LANGUAGES. In the past several yea come to know much more about the distribution of ergative languaɡ characteristics, and many descriptions of such languages have bee Scholars such as Comrie 1978, Dixon 1979, Chung 1978, Silverstei Plank 1979 have analysed ergative languages to isolate typological 1 processes associated with these languages. They have been classifie to how ergativity is expressed or marked, and the extent to whi and semantic factors constrain the expression of ergative distinc a language. As a result of these studies, it is now apparent that usually present only to a degree (cf. Comrie 1978, 1979, Dixon 1979). Ergative systems may co-occur with accusative systems witl languages.

The study at hand brings to this literature yet another dimensic strains the expression of ergative distinctions in a language. Thi: is SOCIOLOGICAL in nature. It classifies ergative languages in terms (to which the expression of ergative distinctions is constrained by sc of use, i.e., by speech register. For many ergative languages (given semantic and syntactic conditions), ergative distinctions will alwa: always be expressed by native speakers. Thus social setting, or tionship obtaining between speaker and hearer, will not affect the of ergativity. Such languages can then be characterized as SOCIALLY ergative languages. However, other ergative languages will be so· IABLE in the expression of ergative distinctions. Social definition: of speaker, or of hearer will influence the extent to which ergative are overtly marked by speakers. Samoan is such a language.

APPENDIX: Canonical transitive verb types in children's speech

MATU'U

Session I:	'ai	'eat'	si'i	'carry'
	tia'i	'throw away'	'ave	'take'
	ta'e	'break'	fai	'do, make'
	'aumai	'give'	tu'u	'leave'
	fa'auma	'finish'	nanā	'hide'
Session III:	'aumai	'bring'	tu'u	'leave'
	fasi	'hit'	ta'u	'report, tell (·'
	fai	'do, make'	'ai	'eat'
	togi	'throw'		
Session V:	pu'e	'catch'	'avatu	'take away'
	tu'u	'leave'	faga	'shoot'
	'ai	'eat'	fulu	'wash'
	ta'e	'break'	fai	'do, make'
	'ave	'take'		

Session VII:	'ave	'take'	fai	'do, make'
	'ai	'eat'	lulu	'shake'
	pu'e	'catch'	'aumai	'bring'
	si'i	'carry'		

IAKOPO

Session I:	togi	'throw'		
Session III:	pō	'smack'	fai	'do, make'
	pu'e	'catch'	'ave	'take'
	ta'e	'break'	tu'u	'leave'
	pa'a	'explode, burst'	kalta	'hit'
Session V:	fasi	'hit'	fai	'do, make'
	'u'u	'hold'	'ave	'take'
	pō	'smack'	fana	'shoot'
	kogi	'throw'	sasa	'hit'
	faia	'do, make' (trans. suffix)	a'a	'kick'
Session VII:	sasa	'hit'	'ave	'take'
	inu	'drink'	fasi	'hit'
	a'a	'kick'	fusi	'bind, lash'
	fai	'do, make'	kogi	'throw'
	'ai	'eat'	fa'akau	'buy'
	ta'e	'break'	ka'u	'report, tell (on)'
	'u'u	'hold'	tu'u	'leave'
	selu	'comb'	fa'a'aka	'make laugh'
	tia'i	'throw away'	pu'e	'catch'
	pō	'smack'	kā	'hit'

PESIO

Session I:	pu'e	'catch'	fai	'do, make'
	'u'u	'hold'		
Session III:	pō	'smack'	selu	'comb'
	'ave	'take'	si'i	'carry'
	kogi	'throw'	fasi	'hit'
	sasa	'hit'	'u'u	'hold'
	fa'akau	'buy'		
Session V:	igu	'drink'	'ave	'take'
	pō	'smack'	faga	'shoot'
	usu	'sing'	fai	'do, make'
	tusi	'write'	pu'e	'catch'
	'ai	'eat'	gagā	'hide'
Session VII:	nanā	'hide'	ku'u	'leave'
	'ave	'take'	su'e	'search for'
	fa'akau	'buy'	mai	'bring'
	fai	'do, make'	fufulu	'clean'
	fofō	'rub'	pese	'sing'
	kia'i	'throw away'	vaelua	'divide'
	keu	'decorate'	kusi	'write'
	loke	'fidget with'		

NAOMI

Session I:	tā	'hit, strike'	ufiufi	'cover'
	tape	'kill (an animal)'	'ave	'take'
	togi	'throw'	tae	'pick up'
	pō	'smack'	sasa	'hit'
	'ai	'eat'	inu	'drink'
	si'i	'carry'		
Session III:	tu'u	'leave'	'ai	'eat' ERG
	fasi	'hit'	'ave	'take'

	pō	'smack'	koli	'twist off and bring d
	sasa	'hit'		
Session V:	kiki	'kick'	fa'amoe	'make sleep'
	kusi	'write'	faga	'shoot'
	'ai	'eat'	pō	'smack'
	kui	'stab'	togi	'throw'
	fai	'do, make'	maua	'keep'
Session VII:	ku'u	'leave'	fai	'do, make'
	'ai	'eat'	kā	'hit'
	togi	'throw'	pō	'smack'
	kipi	'cut'		

NIULALA

Session I:	fasi	'hit'	tatala	'open'
	vaku	'take away'	'ave	'take'
	kuli	'chase'	mai	'bring'
	'ai	'eat'	kogi	'throw'
	kia'i	'throw away'	fai	'do, make'
	ofu	'wear'	fau	'build'
Session III:	fa'a'moe	'make sleep'	pō	'smack'
	kape	'kill (an animal)'	gagā	'hide'
	'ave	'take'	ku'u	'leave'
	sui	'change'	sulu	'put on (cloth)'
	kia'i	'throw away'	maua	'keep'
	fao	'grab'	uku	'fill'
	kaga	'hit' (trans. suffix)		
Session V:	faga	'shoot'	pu'e	'catch'
	'ave	'take'	koso	'pull'
	sua	'butt, crush' ERG	vaelua	'divide'
	ku'u	'leave'	fasioki	'kill (person)'
	fai	'do, make'	kia'i	'throw away'
	kogi	'throw'	'u'u	'hold'
	kā	'hit'	tuli	'chase'
	ū	'sting, bite'	si'i	'carry'
	'ai	'eat'	se'e	'put on, wear (shoes
	fa'akau	'buy'		
Session VII:	maua	'keep'	kuli	'chase'
	iloa	'know'	faga	'shoot'
	misi	'miss'	gau	'break'
	'ave	'take'	fasi	'hit'
	togi	'throw'	'ai	'eat'
	fa'akau	'buy'	tia'i	'throw away'

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