

Culture-specific influences on semantic development: Learning the Tzeltal ‘benefactive’ construction¹

Penelope Brown

1. Introduction

Can the specific language being learned – and its cultural context – have an early influence on children’s semantic development? Language acquisition theorists have generally suspected that the answer is no. The mainstream view has been that children start with concepts drawn from a universal repertoire of meanings, and only gradually modify them to language-specific shape in response to distributional properties of the input. Recent work, however, has provided evidence that children are actually remarkably sensitive to the language-specific semantic properties of certain types of relational words – spatial verbs and adpositions – from a very early age (from 14 months, children show a language-specific bias in comprehension; Bowerman & Choi 2001; Choi 2002). To date we have, however, relatively little evidence for children’s sensitivity to language-specific *constructional* meanings.

The present paper aims to contribute to this discussion by examining how children acquire a particular construction – the ‘benefactive’ – in Tzeltal, a Mayan language spoken by approximately 200,000 people in southern Mexico. The so-called ‘benefactive’ is the basic Tzeltal three-argument ditransitive construction; it is the primary way to express three core arguments in this language. For example: (benefactive suffixes and glosses are in boldface type)²:

- (1) ya k-ak’-**be-t** atzam
ICP1ERG-give-BEN-2ABS salt
‘I give **you** (the) salt.’

This construction is standard for verbs of transfer and certain verbs of speaking (which may be construed as verbal transfer):

- (2) ya '-pas-**be-n** waj
ICP 2ERG-do-BEN-1ABS tortilla
'You make tortillas **for me**.'
- (3) la y-al-**be-n** y-a'yejal
CMP 3ERG-tell-BEN-1ABS 3ERG-story
'He told **me** the story.'

The same construction is often used when the direct object of *any* transitive verb is a possessed noun – then the possessor is almost always promoted to the position of indirect object ('possessor ascension'), as in:

- (4) ya s-mulan-**be-t** a'-na
ICP 3ERG-like-BEN-2ABS 2ERG-house
'She likes **you** your house.' (i.e., she admires it/covets it).
- (5) la s-k'an-**be-0** y-asarona
CMP 3ERG-want-BEN-3ABS 3ERG-hoe
'She asked **her** for her hoe.' [permanently]
- (6) la s-maj-**be-0** s-k'ab
CMP 3ERG-hit-BEN-3ABS 3ERG-hand
'He hit **him** his hand.'

In speech to small children, this construction is very often used in imperatives (e.g., 'Tell-**him** your brother to come here'), warnings (e.g., 'It will burn-**you** your hand! (fire)'), 'Don't touch-**it the dog** its-mouth!'), or offers ('I'll mix-**you** your corngruel, I'll change-**you** your skirt'). It is therefore fairly frequent in input speech.

Tzeltal has no inherently ditransitive verb roots – even *ak'* 'give/put' is not a root ditransitive – and this benefactive construction is the only way to get a third argument into the core of the clause. Although massive argument ellipsis means that the three participants are rarely all overtly expressed as NPs, this construction ensures that the 'recipient' or 'benefactee' or 'affectee' participant is overtly marked on the verb.³ As we shall see, it has a much more general meaning than 'benefactive', so I call this Tzeltal construction BEN.⁴ There are two additional ways to get three arguments into a sentence, but both place the third argument in an adjunct.

I will show that Tzeltal children acquire this BEN construction remarkably early; they start using it by the two-word stage and apparently have productive use by around age 2;6, well before they reliably cross-

reference other arguments – Agent, Possessor – with ergative marking (Brown 1998b). These early BEN suffixes appear in frozen forms at the one- and two-word stages, but rapidly appear with variation across person and across different verbs. Furthermore, even at an early stage children do not restrict this construction to expressing canonical transfer scenes, but use it much more generally to express situations where something implicitly good or implicitly bad is at issue. The children seem to be attuned to the language-specific semantics of the construction: they do not simply use it at first for transfer scenes which semantically require three participants (an Agent, a Patient or Theme, and a Goal/Recipient), but, from the beginning, scenes that semantically have two-participants are among those where this ‘affected’ participant is indexed by children. For example⁷:

- (7) Lus, age 2;0: _ *-pojben alal* ‘(He) steals **me** (my) doll.’
 (8) Xan, age 2;2: _ *yixlanbet laso* ‘He played with (your) rope **for/on you**.’
 (9) Xan, age 2;2: _ *-lo’ben -tomut antun i* ‘Antun ate **me** (my) egg.’

Children’s early mastery of the BEN construction is of interest to language acquisition theorists because, from a typological perspective, there is reason to expect children to have some trouble expressing three participant events. There is a considerable amount of variation both across languages, and within one language, in how these are linguistically coded; in particular they vary in terms of how participants involved in three-participant situations (the Agent, Theme, and Goal/Recipient) are encoded (Brown, Eisenbeiss & Narasimhan 2002; Narasimhan, Eisenbeiss & Brown 2007). Three-place predicates have therefore been the focus of recent theoretical attention, as an obvious testing ground for current theories of syntax-semantics mapping (Margetts & Austin 2007).

Because of this typological variability, three-place predicate constructions potentially provide a challenge for children acquiring language. Children have to determine (a) what linguistic devices can be used for encoding three-participant events in the language, (b) what are the respective semantic contributions of these devices, and (c) what are the construction- and language-specific constraints on their combination. These can all cause difficulties for language learners. For example, German children produce characteristic kinds of case-marking errors when expressing three-participant events (Eisenbeiss & Matsuo 2003). Three-place predicates are therefore an important locus for examining how children acquire argument structure and how this process

is influenced by the typology of the language they are learning as well as by culturally-specific semantic categories (Bowerman, Brown, Eisenbeiss, Narasimhan & Slobin 2002; Slobin, Bowerman, Brown, Eisenbeiss & Narasimhan in press).

Research on language acquisition has assembled considerable evidence for how, across different languages, transitivity classes and argument structure are learned (cf. articles in Slobin (ed.) 1985, 1992, 1997; Pye 1985), yet acquisition of ditransitive and other three-place predicates has been much less thoroughly explored (exceptions include Billington 2002; Demuth 1998, 2003).⁶ The questions raised here focus on the expression of a third argument in the production of young Tzeltal children: When do Tzeltal children start using the BEN construction? Do they start with the prototypical benefactive semantics: 'give'? When is the construction productive? What are their preferred verbs in the construction at different ages? What is the developmental trajectory? Do they have alternative solutions to expressing a third argument? The data also speaks to larger issues: How are transitivity classes and argument structure learned in a language with massive argument ellipsis? How do Tzeltal children learn what culturally appropriately gets expressed with the BEN construction – what is the role of particular cultural practices in socializing children to culture-specific ways of thinking in this case?

The plan for this paper is as follows: in section 2, I outline a typological perspective on benefactives and present the 'give'-schema as the putative prototype for these constructions crosslinguistically. In section 3, the Tzeltal BEN construction is described in relation to transitive and intransitive constructions, and its challenges to the learner are outlined. Section 4 presents the Tzeltal child data, showing the range of verbs three children use in the BEN construction at four age points (roughly ages 2;0, 2;6, 3;0, 3;6). In section 5, I discuss the pragmatic uses for this construction in both child speech and adult input speech. Section 6 presents my conclusions.

2. Benefactives crosslinguistically

'Benefactives' refers to those three-argument constructions which are derived from a transitive stem by verbal suffixes, or, in languages like English, by word order alternations. Like applicatives, benefactives are verbal affixes (or alternations) that increase valence, 'those constructions in which beneficiaries are coded as arguments ... rather than as adjuncts' (Shibatani 1996: 159), as in (10), in contrast to (11):

- (10) John bought **Mary** a book.
(11) John bought a book **for Mary**.

Many languages have two forms (alternations) for the benefactive: the double object form (as in (10)) and the prepositional phrase form (as in (11)). In English, the contrast is marked by word order and, in the second form, by a preposition marking the recipient of the action. Choice of form in this alternation (as in the causative, dative, or locative alternations) indicates the speaker's current choice of perspective (see, for example, E. Clark 1991). In Tzeltal, there is no alternation, but simply the choice of the benefactive construction, marked by a specific set of affixes that index the person affected on the verb. As this three-argument construction also requires you to take a particular perspective, it could be expected to be more difficult for children to acquire than one- (intransitive) or two-argument (transitive) constructions that are associated with the majority of verbs.

Shibatani (1996) argues that benefactives are typologically interesting for several reasons. First, they are interesting to syntacticians as an important example of one way languages can express relatively peripheral participants as central clausal (core) arguments (e.g., indirect objects, datives, 'external possessors'); these are 'voice alternations' in the sense that you have to take a 'perspective' on the scene to formulate grammatical encoding. Second, benefactives are famous for displaying language-internal semantic specificity – verbs you can and cannot use the construction with; cf. Pinker (1989). There is generally a cline of acceptability for verbs used in a benefactive construction, with different cut-off points for different languages; compare these two sentences in English:

- (12) John threw **Mary** the ball.
(13) ? John opened **Mary** the window.

In contrast, in German the analogue to (13) is acceptable and the cut-off point is with the verb meaning 'close' (examples are from Shibatani 1996: 170):

- (14) Otto öffnet **Karin** die Tür.
[lit.] 'Otto opened **Karin** the door.'
(15) *Otto schliesst **Karin** die Tür.
[lit.] 'Otto closed **Karin** the door.'

Many theorists think of 'give' as the prototype schema for three-argument verbs, and thus for benefactive scenes (Shibatani 1996); 'give' verbs have therefore received a lot of crosslinguistic attention (Newman 1996, 1997, 2002; Margetts 2004). Gleitman (1990) extends this perspective to language acquisition, using 'transfer scenes' expressed by verbs meaning things like 'give', 'put', as a core example of the kind of universal semantics/syntax mapping that enables children to 'bootstrap' verb meaning from syntax:

Verbs that describe externally caused transfer or change of possessor of an object from place to place (or from person to person) fit naturally into sentences with three noun phrases, for example, John put the ball on the table. This is just the kind of transparent syntax/semantics relation that every known language seems to embody.... *Restating this more positively, the component 'transfer' is inserted into a verb's semantic entry in case it is observed to occur in three noun-phrase structures.*

(Gleitman 1990: 30; italics added)

Verbs of transfer ('give', 'put', 'receive', etc.) are often considered to be the canonical three-argument verbs for children learning language (e.g., Slobin 1985, Gleitman 1990).

The claim, then, in these approaches to three-place predications is that to use a benefactive you need a situation *construable as* one of 'giving', for example in the sense of the 'give' schema of Shibatani (1996: 173–174):

(16) 'Give' schema:

Structure: [NP1 NP2 NP3 GIVE]

NP1 = coded as subject

NP2 = coded as primary object or dative IO

NP3 = coded as secondary object or as a direct object

Semantics: NP1 causes NP2 to have NP3; i.e.

NP1 = human agent, NP2 = human goal, NP3 = object theme

NP2 exercises potential possessive control over NP3

NP1 creates the possessive situation on behalf of NP2

When this 'give' schema is applied to benefactives, two modifications are required. NP3 can be an event, not just an object (metonymically related):

(17) John sang **Mary** a song.

And it can be malefactive: NP1 did something to NP3 for either the benefit or the malefit (harm) of NP2:

(18) John hit **me** my hand. [see ex. 6]

Tzeltal, however, presents an interesting challenge to the view that transfer events are the prototype for three-argument constructions, with ‘give’ the typical verb, since in Tzeltal, three-participant events are expressed with the BEN construction, and for this three-argument benefactive construction – although it can be used to express transfer (‘give’) events – the event types that are prototypical are centred more on activities that benefit or harm people than on the transfer of possessions per se. In contrast to Shibatani’s proposal that transfer events are prototypical here, I shall propose a competing hypothesis: there is no universal prototypical event type for three-argument constructions; rather, language-learners have to identify the event types relevant for mapping three-argument constructions in any one language. They must learn what the conventions are in that language and indeed, in their speech community, as such conventions may vary across different speech communities whose members speak ‘the same’ language.

Let us turn to the details of the benefactive construction in Tzeltal.

3. The Tzeltal BEN construction

3.1. Argument marking: one, two, or three arguments

Tzeltal is a basic VOS language; arguments, when overtly expressed as NPs, generally follow the verb. There is obligatory aspect marking and person cross-referencing on the verb. Arguments are cross-referenced on verbs in an ergative pattern, with *ergative prefixes* for the subjects of transitive verbs, and *absolutive suffixes* for the objects of transitive and subjects of intransitive verbs, as shown in (19) and (20):

(19) Person-marking on intransitive verbs (one argument):

Aspect + Verb_Stem + Absolutive (SUBJ NP)

e.g. ya x-way-on

ICP ASP-sleep-1ABS

‘I am sleeping.’

(20) Basic person-marking on transitive verbs (two arguments):

Aspect + Ergative + Verb_Stem + Absolutive (OBJ NP) (SUBJ NP)

e.g. la s-maj-on

CMP 3ERG-hit-1ABS

‘He hit me.’

If there are three arguments, however, the indirect object is promoted to a position where it, rather than the object, engenders absolutive suffixes on the verb – i.e., the Recipient is treated like the Patient of a transitive verb (Dayley 1981)⁷; this is actually a crosslinguistically frequent pattern (Dryer 1986). So there are three core arguments in the Tzeltal BEN construction, although only two are cross-referenced on the verb; the Patient (direct object argument) is not demoted to an oblique case but is not marked on the verb and, if expressed, comes directly after the verb:

- (21) Person-marking on ditransitive verbs (three arguments):
 Aspect+Ergative+Verb_Stem+BEN+ABS (OBJ) (SUBJ) (RECIP)
 la s- maj- **-be-n**⁸ (j-k'ab)
 CMP 3ERG- hit- BEN-1ABS (1ERG-hand)
 'He hit **me** (my hand).'

As we saw in examples (1) - (6), this BEN construction is standard for verbs of transfer and certain verbs of speaking; furthermore, when the direct object of *any* transitive verb is a possessed noun then the possessor is almost always promoted to the position of indirect object ('possessor ascension').⁹ The referent of the benefactive object normally has to be the same as the possessor:

- (22) la y-ajch'al-tes-**be-n** j-tzek
 CMP 3ERG-mud-CAUS-BEN-1ABS 1ERG-skirt
 'He got my skirt muddy **for me**.'
- (23) la s-butz-**be-n** k-inam
 CMP 3ERG-kiss-BEN-1ABS 1ERG-wife
 'He kissed **me** my wife.'

But there are exceptions to this generalization; for example the referent of the BEN argument is not the same as the possessor in (24) or (25):

- (24) ya k-ik'-**be-t** bel ta loktor te Xun-e
 ICP 1ERG-take-BEN-2ABS awaywards PREP doctor ART Xun-CL
 'I'll take **for you** Xun [addressee's son] to the doctor.'
- (25) ya j-chol-**be-t** s-k'op dios
 ICP 1ERG-recite-BEN-2ABS 3ERG-word god
 'I recite God's word **for you**.'

BEN with non-transfer verbs is thus not restricted to possessor raising. Crucially, no Tzeltal verb root, not even *ak'* 'give/put', is obligatorily ditransitive in the sense that it always *has* to appear in BEN.¹⁰ With an expressed Recipient, verbs of transfer do require BEN. But, generally, use of a verb in a transitive or ditransitive construction is differentially preferred depending on the particular predication and also on cultural expectations. Some sentences are judged ungrammatical without BEN:¹¹

- (26) *ya k-il-be-t a'-sit (*k-il)*
 ICP 1ERG-see-BEN-2ABS 2ERG-eye
 'I see **you** your eyes' [i.e., I look at you]

but many verbs can appear in either a transitive or ditransitive construction equally happily:

- (27) *ya j-man a'-wakax OR ya j-man-be-t a'-wakax*
 ICP 1ERG-buy 2ERG-cow OR ICP 1ERG-buy-BEN-2ABS 2ERG-cow
 'I buy your cow', or, 'I buy (from) **you** your cow.' (BEN is optional)

- (28) *ya s-poj-be-0 s-mamalal*
 ICP 3ERG-steal-BEN-3ABS 3ERG-husband
 'She steals (from) **her** her husband.' (BEN optional but preferred)

Using BEN can disambiguate the argument roles, an important feature in a language with free argument ellipsis:

- (29) *ay antz ya s-mulan-be-n j-mamalal*
 exist woman ICP 3ERG-like-BEN-1ABS 1ERG-husband
 'There's a woman she likes **me** my husband.' [i.e., she covets him]

Without BEN, sentence (29) would be read as meaning 'my husband' is the liker of the woman. In addition, certain verbs can have two entirely distinct meanings when used in the transitive vs. the ditransitive (BEN) construction; for example, the verb *na'* 'to know': in the ditransitive *ya s-na'-be-n j-ba* means 'He knows me', but in the transitive *ya s-na'-on* means 'He thinks of me'.

Is there a cline of acceptability for different verbs used in this construction? There is no evidence that this is the case for Tzeltal. A very large range of verbs – virtually any transitive verb – can be construed in terms of affecting someone or something in such a way as to generate reference to a third,

Recipient/ Affectee argument. There is thus a very general meaning for the construction – not ‘transfer’, but ‘help/hurt Recipient/Affectee’, a meaning that is invoked whenever a verb is expressed in this construction (which therefore seems to be a single construction with very wide application). BEN conveys the sense that the action of doing something to someone’s bodypart or (potential) belongings has affective relevance to the possessor. Using the construction appropriately requires a culturally specific – and context specific – assessment of different ways actions on possessors can be relevant to, or affect their possessors.

One occasionally hears speakers of English produce utterances with a similarly ‘malefactive’ flavor using the ‘*on PRONOUN*’ construction, though this construction is decidedly marked in English:

(30) Overheard comment by bride (to guest at wedding) eating grapes:

‘I’m just afraid to eat them all **on you**’ (Kwedding: July 2002)

(31) Remark of wife on phone to husband, about having told others about something he didn’t especially want her to:

‘There, I told them **on you**.’ (MD: Feb 2003)

The meaning of this English ‘*on PRONOUN*’ construction seems to be generally ‘hurt, or be otherwise affectively relevant to Recipient/Affectee.’ Constructions with a meaning of this kind occur in many languages (O’Connor 1996). What is language- and culture-specific about Tzeltal BEN is the wide range of event types that the construction covers and the culture-specific knowledge necessary to construe a situation as warranting encoding with BEN.

There are two alternative ways to express three participants in Tzeltal; neither of these cross-references the participant on the verb:

(i) an oblique prepositional phrase (this is not possible for expressing recipients):

(32) la y-ak’-0 jun ta mexa
 CMP 3ERG-give/put-3ABS book PREP table
 ‘He put the book on the table.’

(ii) a possessed relational noun phrase with *y-u’un* ‘its relation’, or ‘because of me/you/he/she/it’:

- (33) la y-ak'-0 jilel jun y-u'un
 CMP 3ERG-give/put-3ABS remaining_behind book 3ERG-RelN
 te Jxun-e
 ART Jxun-CL
 'He left behind a book for Xun.'

In contrast to BEN, neither of these constructions appears early in child speech.

3.2. The Tzeltal child's task in learning BEN

The Tzeltal-learning child has to learn to distinguish different semantic roles for arguments; plausibly, she has to learn the transitive construction first, cross-referencing A (agent) and O (direct object) arguments on the verb and expressing them (optionally) in an overt NP after the verb, and then modify this for the ditransitive, expressing A and R (recipient/benefactee) arguments cross-referenced on the verb and O (optionally) in an NP after it; absolutive suffixes on the verb now cross-reference R not O. Secondly, the child has to learn when to use this construction: very often (but not always) with some verbs ('tell', 'give', and any verb followed by a possessed noun as O), but sometimes with other verbs – namely, whenever taking a perspective that someone is 'affected' in an emotively relevant way by the action of the verb on the object.

Learning when to take this perspective involves learning the contrast between the BEN perspective (agent does something to patient that affects someone/something else) and the transitive perspective (agent does something that affects patient). Depending on what the 'something' is that's being done, different constructions are preferred. For example, you can say the sentence in (34), using BEN:

- (34) ya j-k'opon-be-tik dios ta s-tojol te chamel.
 ICP 1ERG-speak-BEN-1ERGPL god PREP 3ERG-concern ART sickness
 'We-inclusive speak to God **for him** about the sickness.'

But this would be more naturally expressed transitively, as in (35):

- (35) ya j-chol-tik s-k'op dios a'w-a'y
 ICP 1ERG-recite-1PL 3ERG-word god 2ERG-know/feel
 'We-inclusive speak to God you know.'

Children have to learn the subtle understandings and values that condition which formulation is preferred in such cases.

The learning task appears simple in some respects, difficult in others. Tzeltal inflectional morphology is in general highly regular and not particularly difficult for the learner (Brown 1998b). The morphology of BEN is straightforward, with the form of the benefactive suffixes transparently related to that of the absolutive, as can be seen in Table 1.¹² Yet this morphology is cross-referencing a different kind of argument, a Recipient/Affectee rather than a Patient, which might be expected to confuse children.

Table 1. Absolutive and benefactive suffixes in Tzeltal

	Absolutive	Benefactive + ABS
1 st sg.	-on	-be-n
2 nd sg.	-at	-be-t
3 rd sg.	-0	-be-0
1 st pl. incl.	-(o)tik	-be-tik
1 st pl. excl.	-on jo'tik	-be-n jo'tik
2 nd pl.	-ex	-be-x
3 rd pl.	-ik	-be-ik

Furthermore, BEN raises a number of morphosyntactic complexities that the child has to grapple with in this context. These arise especially in connection with plural marking, which is in many contexts optional. Frequent argument ellipsis means that overt NPs often are not present to disambiguate whether arguments are singular or plural. One site of potential confusion is the interaction between ergative plural and BEN plural. Children have some trouble with this, as we shall see in section 4.3. Whether plural *-ik* has scope over the BEN argument or the ERG argument is sometimes in doubt – contrast (36) and (37) (cross-referencing affixes that belong to the same argument are in boldface):

(36) ya s-pas-**be-ik**
 ICP 3ERG-do-BENpl
 'He does (it) **for them**'.

(37) ya s-pas-**be-ik**
 ICP 3ERG-do-BEN-3ERGpl
 '**They** do it for him/her/it.'

There are also potential problems with morpheme order in the plural, and with the passive. The passive, marked with the suffix *-(o)t*, is possible in 3rd person only in BEN. Its form is identical with that of 2nd person singular absolutive of BEN, although as passive it is relatively rare in child-directed speech, so it is unlikely to present an early problem:

- (38) **al-be-t**
 tell-BEN-PASS
 ‘(It) was told to **him**.’
- (39) **k’an-oj-be-t** **winik-etik**
 want-PERF-BEN-PASS man-PL
 ‘The men have asked **him** for it.’
 (lit: ‘**He** has been asked for it (by) the men.’)

There is thus considerable morphosyntactic complexity to master in connection with BEN. What about the semantics – can universal meanings like generic ‘give’ help the child here?

3.3. Problem with the ‘give’ schema as the core meaning of Tzeltal BEN

The Tzeltal benefactive construction is THE three-argument construction (the only one). No alternative phrasing is possible to express three core arguments – Tzeltal has only one, general-purpose, preposition, which cannot be used to say things like ‘I bought the book FOR Mary’ using an oblique prepositional phrase. Therefore, as we have seen, although BEN can be used to express transfer events, it can also be used for events of many other kinds. BEN conveys the sense that the action of doing something to someone’s bodypart or (potential) belongings has affective relevance to the possessor. While this very general meaning is not specific to Tzeltal, using the construction appropriately requires a culturally-specific assessment of different ways actions on possessors can be relevant to, or affect, their possessors¹³.

Focusing here on the semantics, we may ask: What kinds of situations take BEN descriptions in Tzeltal, and how do children learn this? And how do they learn the associated cultural knowledge?

4. Child data

4.1. The data samples

The database for the research reported here is based on recordings of spontaneous language production of Tzeltal children interacting with family members and/or the investigator in their homes; these were video- and/or audiotaped every 4 to 6 weeks over a period of several years.¹⁴ I report here on data from three Tzeltal children: two girls (Xan, Lus) and one boy (Mik), sampled for about 4-8 hours each, at four age points roughly six months apart (see Table 2).

Table 2. Child samples for benefactive analysis

LUS			XAN			MIK		
Sample	Age	MLU	Sample	Age	MLU	Sample	Age	MLU
6 sessions	2;0	1.6	7 sessions	2;2	1.7	4 sessions	2;3	1.1
2 sessions	2;6	2.2	2 sessions	2;7	2.9	5 sessions	2;4- 2;6	2.0
3 sessions	3;1	3.4	3 sessions	2;11- 3;2	3.2	5 sessions	3;2	3.1
2 sessions	3;6	3.7	3 sessions	3;5	4.1	4 sessions	3;7	3.9

In these samples I coded all child utterances for argument structure; I then extracted the forms with BEN marking for qualitative analysis of the semantics and pragmatics of the verbs used in this construction by the children. (I excluded from analysis utterances that were verbatim repeats of prior utterances, as well as any whose meaning was unclear in the context.)

4.2. What verbs do children use BEN with?

Do children initiate use of BEN with verbs that have a transfer meaning? By 'transfer' here I mean physical movement of an object between persons or places, in line with Shibatani's 'give' schema in (16) above. Of course one can imagine that metaphorical transfer is part of the meaning in virtually any example, but children this age are not likely to have much grasp of metaphor. Let's look in detail at what verbs children first start using BEN

with in my samples. Note that, in most of these first BEN uses, the children omit aspectual markers and the ergative prefix (missing morphemes are indicated here by initial underline (for aspect) or hyphen (for ergative)).

Examples: LUS, 2;0:

In her first samples, Lus uses BEN with 7 types of verbs, including the following:

LUS, age 2;0 Transfer

poj 'steal, take away from' [15 tokens]

__-poj-**be-n** alus 'Alux steals it **from me**.'

__-poj-**be-n** k-u'un '(He) steals mine **from me**.'

__-poj-**be**-sijtz '(You) steal (her) shawl **from her**.'

ak 'give, put' [3 tokens]

__ k-ak'-**be**-ix 'I gave it **to him**.'

ak'-**be-tik** 'Give it **to us**.'

__ k-ak'-**be** ek moch 'I give **her** a basket too.'

tzak 'take, grasp in hand' [2 tokens]

__-tzak-**be-n** Nik 'Nik takes it **from me**.'

tzak-**be-n** tal 'Get it **for me**.'

LUS, 2;0: Non-transfer

chol 'change [clothing]'

chol-**be** 'Exchange it [skirt] **for her**.'

[it should be: jcholes**be** stzek 'Change **her** her skirt.']

al 'tell'

__ k-al-**be** me'tik lumine 'I'll tell it **to Mrs.** over there.'

kus 'wipe'

__-kus-**be-t** '(I) wipe it **for you**.'

At this age, there are not enough examples to tell whether BEN is productive; LUS uses it in all three persons but in most cases (except for *poj* 'steal' and *ak* 'give/put') in only one person for a given verb root.

Examples: XAN, 2;2

XAN in her first sample uses BEN more prolifically than LUS, with 17 verb types. For example:

XAN, age 2;2: Transfer

poj 'steal from' [2 tokens]

__-poj-**be-n**-k'ab xutax 'The scarecrow steals **from me** (my) hand.'
[it should be *stzakben* 'he grabs it for me']

__-poj-**be-n** alal '(He) steals **from me** the doll.'

ak 'give, put' [2 tokens]

ya k-ak'-**be-tik** -we' mut 'We-incl. give it **to the chicken(s)** to eat.'
[it should be *swe'el mut*]

__ k-ak'-**be** 'I'll 'give' it **to him**.' [threat]

ich 'get'

__ k-ich'-**be-t** 'I get it **from you**.'

XAN 2;2: Non-transfer

puk 'mix with hand' [3 tokens]

__-puk'-**be-n** '(She) mixes (corngruel) **for me**.'

16 verbs with one or two tokens each, e.g.:

__-koj-**be-n** j-ba-e '(We) knocked **me** (my head)' (i.e., our heads
knocked against each other) [Target: should be *la jk'ojbe jba jo'tik*]

__-ti'-**be-n** mut '(It) the chicken bit **me** (my-foot).'

__-boj-**be-t** '(He) hit **you** (your-bodypart).'

__-muk-**be** y-akan '(I) cover **her** her foot.' [doll]

ma me '-kas-**be** y-akan 'Don't break **it** it's foot.'

la -k'ech'-**be** -nuk' alal '(He) twisted off the doll's neck **for it**.'
[i.e., for the doll]

__-tij-**be-tik** 'We-inclusive push it **for her**.'

chuk-**be-n** 'Tie it **for me**.'

__-nup-**be** '(I) blow **for it** (the fire)' [meaning: 'I blow on the fire for it
(the fire) so it will burn better.']

__-lo'-**be-n** tomut '(He) is eating **me** (my) egg.'

_y-ixlan-**be-t** laso antun i, ... y-ixlan-**be-t** laso-tat antun i, laso ja'at i
 'Antun plays_with **for_you** rope, ... Antun plays_with **for_you** rope
 father, you(r) rope.' [telling her father, tattling on her brother Antun's
 misdemeanor. Target: *ya yixlanbet a'laso ja'at te antune.*]

Again, Xan uses BEN in all three persons and first person plural, but with the exception of *ak* 'give/put', not more than one person per verb type.

Examples: MIK 2;3

There is less evidence in Mik's data for this construction; he is in general less advanced than the other two children at this age. His first uses of BEN (in 12 samples examined beginning from age 2;0) do not appear till age 2;3, with 3 types.

MIK: 2;3: Transfer

- pas* 'do/make' [2 tokens]
 -pas-**be** ini. -pas ini. 'Do this **for it**. Do this.' [stack blocks]
 -pas-**be-n** i. 'Do it **for me**.' [open a plastic bag]
ak 'give, put' [2 tokens]
 ak'-**be-n** la papa 'Give it **to me**.'
 ak'-**be** me "'Give' it **to him**.' [threat]

MIK 2;3: Non-transfer

- k'ej* 'put away' [1 token]
 -k'ej-**be** Pontz '(We'll) put it away **for Pontz**.'
 [lollypop, for his brother Pontz]

Thus, for two of his three verbs (*ak* 'give/put' and *pas* 'do/make'), Mik contrasts two different persons with the same root. He also uses both of these verbs in transitive constructions.

Summary

The children use a wide range of verbs with BEN in their first samples, and they use BEN in different persons right from the beginning of the sampling period. For all three children, at this early stage (MLU 1.1 to 1.7), there is no evidence yet of morphological productivity – no verbs are used with all three (singular) person markers in the data sampled, and most appear with

only one. But the range of verbs used with BEN rapidly widens with age, as can be seen in the summary presented in Table 3 below:

Table 3. Cumulative summary of verb types used with BEN, all 3 children, (and tokens for those used more than once)

	LUS	XAN	MIK
age 2;0	types: 7 used more than once: <i>poj</i> 'steal from' (15) <i>ak</i> 'give' (3) <i>tzak</i> 'grasp' (2)	types: 17 used more than once: <i>puk</i> 'mix by hand' (3) <i>chuk</i> 'tie' (2) <i>poj</i> 'steal from' (2) <i>ak</i> 'give' (2) <i>muk</i> 'cover' (2) <i>nup</i> 'blow on' (2) <i>ixlan</i> 'play with' (2) <i>ti</i> 'bite' (2)	types: 2 more than once: <i>pas</i> 'do/make' (2) <i>ak</i> 'give' (2)
age 2;6	new types*: 6 <i>pas</i> 'do/make' (4) <i>ich</i> 'get' (4) <i>kuch</i> 'carry' (2)	new types*: 8 <i>tilp'un</i> 'untie' (4)	new types*: 9 <i>chuk</i> 'tie' (13) <i>poj</i> 'steal from' (3) <i>jol</i> 'open' (3)
age 3;0	new types: 10 <i>man</i> 'buy' (8) <i>chuk</i> 'tie' (3)	new types: 16 <i>otzes</i> 'make-enter' (6) <i>ch'ol</i> 'pour' (3) <i>il</i> 'see' (3) <i>set</i> 'cut' (3) <i>ch'ay</i> 'drop' (2) <i>lok'es</i> 'make exit' (2) <i>jom</i> 'pierce' (2)	new types: 15 <i>tij</i> 'drive' (5) <i>man</i> 'buy' (5)
age 3;6	new types: 12 <i>tuch</i> 'break' (4) <i>le</i> 'look for' (3) <i>toch</i> 'peel' (3)	new types: 11 <i>pech</i> 'braid' (3) <i>toy</i> 'raise-high' (2)	new types: 2 <i>nit</i> 'pull' (4) <i>latz</i> 'pile' (2)

* New types = for each sample, types new since the last sample, not produced in prior samples

If, as the criterion for a certain degree of productivity, we take production with several different verbs across all three persons, then the children appear to productively use BEN by their samples at age 28 to 32 months. BEN develops, in the sense that children use it initially with a few verbs

and a strong emphasis on first person; by age 2;4 to 2;8 they have many verbs and several persons per verb. They continue to add verbs throughout the data sampled (a total of 39 verb types with BEN in Lus's samples, 59 for Xan, 27 for Mik.).

4.3. Errors and innovations

Errors with BEN are relatively rare. Early on, children sometimes use a verb in a context that seems to need BEN without the BEN, so errors are errors of omission (of BEN, as well as of aspect, ergative and absolutive markers). There are a few person and number errors, as in:

(40) ABS instead of BEN: Xan age 2;2: -ti'-at 'bite you'
[instead of *ya s-ti'-be-t* 'It bites (it) for you.']

(41) Person errors: Lus age 3;0: *ma ba *la !k\ak'-be-n* *kaloj ek i antun i*
'Antun didn't give **me** the car!
[using 1st-person ergative prefix (instead of 3rd) plus 1st-person BEN.]
(This latter is not really a BEN error but an ERG error, involving a reanalysis of the root as being vowel-initial.)

But I have found no obvious examples of semantic errors (inappropriate uses) in the data examined.

4.4. Input

Much could be said about the input; here I report on a brief examination of one session of about one hour, with five adults and four older children (aged 4, 6, 8, and 11) present, all of whose speech I consider to be relevant input for the focal child (Tzeltal children receive a large proportion of their caregiving, and hence input speech, from older siblings and cousins). This sample consisted of 970 input utterances, of which 120 used the BEN construction, with 25 different verb types, representing all persons, all aspects, and many constructions including passives and reflexives with BEN. Clearly, there is no shortage of benefactive in speech to small children.

The input verbs used three or more times with BEN during this one hour sample are given in Table 4.

Table 4. Input verbs used with BEN in a one hour session

Verb root	gloss	tokens
<i>ak'</i>	'give, put'	55
<i>poj</i>	'steal, take away'	15
<i>le</i>	'search for'	6
<i>al</i>	'tell'	6
<i>tzak</i>	'grasp in hand'	5
<i>pas</i>	'do, make'	5
<i>man</i>	'buy'	4
<i>tij</i>	'move, push'	3
<i>nit</i>	'pull'	3

It can be seen that 'give/put' is far and away the most frequent; on these grounds it might be considered to be the prototype for this construction. This makes it all the more interesting that children's usage at age two does not favor 'give' in this construction. The input has examples of 'give' used both in the transfer meaning and in more grammaticalized complex verb constructions, with both inanimate and animate themes:

(42) *ak'-be-0 laj junuk ek*
'Give **him** one [puzzle piece] too.'

(43) *ban ak'-be-0 s-me'*
'Give her [baby] **to her mother**.'

BEN also occurs in the input with inanimate BEN arguments:

(44) *s-xat'-oj-be-0 y-akan*
'He has broken its wheel [of toy cart] **for it**.'

with explicit locative arguments:

(45) *y-ak'-oj-be-0 ta patna*
'He has put it [her lolly] **for her** at the back of the house.'

(46) *chajp ya x-ba x-tuch-be-n ta s-be k-ik'*
'It's weird how it pinches **me** at my throat.' [lit. 'at its-path my breath']
[he has licked the bubble liquid]

and with complex verbs:

- (47) ak'-**be-0** laj s-tik'
 give/put-BE-3ABS QUOT 3ERG-insert
 'Let **her** insert (it).' [puzzle piece]
- (48) ma me 'w-ak'-**be-0** s-ta-0 ajch'al
 NEG PT 2ERG-give/put-BEN-3ABS 3ERG-reach dirt
 'Don't let **it** touch the dirt.' [puzzle piece]
- (49) la y-ak'-**be-n** k-uch'
 CMP 3ERG-give/put-BEN-1ABS 1ERG-drink
 'She gave it **to me** to drink.' [corn gruel]

Complex verbs formed with roots other than 'give/put' also occur with BEN in the input:

- (50) pas-**be-n** k-il i
 do/make-BEN-1ABS 1ERG-see DEIC
 'Do it **for me** for me to see.'

An additional 16 other verbs were used once only, including verbs meaning things like 'set-down-upright on top of something', 'know', 'clap (hands)', 'make-enter', 'copy (imitate)', 'mix in hand (corngruel)', 'burn', 'bite', 'order (something to be brought from far away)', 'break (hard solid thing)', 'tear (rope/cloth)', 'make-better', 'see', 'pour (liquid)', 'spill', and 'pay for'.

Another feature of the input is that the same verb is sometimes used contrastively in both the BEN construction and in a transitive construction in the same context, for example:

- (51) a. CAL: cha'-lek-ub-tes-a xan tal.
 'Make it better again.' [bubble liquid]
- b. CAL: lek-ub-tes-**be-n** tal i.
 'Make it better again **for me**.'

Thus there are contexts in the input where the special function of BEN – as taking the perspective of affective significance for an event participant – is highlighted, making it perhaps salient for the children.

In short, even from this small sample we can see that the input features the BEN construction used with a wide variety of verbs in a range of constructions. It seems to provide ample opportunity for the child to identify a range of event types to which it applies, make the connections across events

involving doing someone or something good (or harm), having an effect on their possessions (including transfers), and having an effect on their state of mind (telling and asking, for example). This in turn should enable them to delimit the domain for the three-argument construction in Tzeltal.

4.5. Significance of Tzeltal children's BEN usage

Several things are clear from the data. First, BEN is early – despite massive argument ellipsis (children never express all three arguments overtly at this age of 2;0-2;8) the children are using verbs in a three-argument construction. BEN shows some productivity for all three children by 2;4 to 2;8. Secondly, physical transfer is by no means the only meaning for verbs used with BEN, even at age 2;0. Thirdly, BEN develops: children use it initially with a few verbs and a strong emphasis on 1st person; by age 2;6 they have many verbs and several persons and they continue to add verbs throughout the data sampled. Finally, it is noteworthy that BEN is accompanied by some of the most complex syntax the children show at each of the ages sampled. For example, Xan, age 2;2, can be seen struggling for the syntax to express all three arguments:

- (52) *y-ixlan-be-t laso antun i, ... y-ixlan-be-t laso tat antun i, laso ja'at i.*
 Antun plays_with **for_you** rope, ... Antun plays_with **for_you** rope
 father, your rope.
 [telling her father, tattling on her brother Antun's misdemeanor]

BEN is a site for syntactic complexity also in the data at older ages; for example, Xan age 3;0 produced the following:

- (53) *ya ba-n k-ak'-be-0 xan s-lo'-ik*
 ICP (ASP)-go-1A 1ERG-give-BEN-1ABS again 3ERG-eat-3ERG-PL
i matz mut i
 DEIC corngruel chicken DEIC
 'I'll go give **the chicken(s)** corngruel again for them to eat.'
- (54) *la' j-bul-be-tik y-ixim-ik i*
 Come 1ERG-pull_up-BEN-1ERG-PL 3ERG-corn-3ERG-PL DEIC
a'-me'jun i xi-e
 2ERG-aunt DEIC said-CL
 'Come let's pull out **for her** their corn your aunt,' she said.

In these examples we have a hint that the semantic motivation to use BEN – talking about things in relation to an affectee – may be an important prod to children’s syntactic development.

5. Discussion

We have seen that Tzeltal children are using the BEN construction with a variety of verbs even at the two-word stage. What are the children using the BEN construction *for*?

5.1. Illocutionary point of BEN

Given its good/bad-affectee meaning, BEN is particularly useful, and often used, to do things like complain, accuse, tattle, plead, or request things to do with one’s belongings, or with services or help. These are speech acts small children are prone to, and are often subjected to by others. In speech to small children, the BEN construction is very often used in imperatives, warnings, threats, and in offers of food or assistance. It is therefore quite frequent in the input, although of course not nearly as frequent as transitive or intransitive constructions (Brown 1998b). It is also used in some cultural routines, for example, the ‘scarecrow’ routine illustrated in (55), where a brother (CAN, age 5;0) teases his 2;2-year-old sister XAN about the bad things the imaginary scare-monster ‘scarecrow’ did or will do to her, and she joins in the game:

(55) [xan7feb95]

- | | | |
|-------|-----------------------------------|--|
| CAN: | la y-ak’- be-t nujkul. | ‘He gave- you ‘leather.’
[i.e., a beating] |
| *XAN: | laj. | ‘He did.’ |
| *CAN: | la s-k’as- be-t a’-nuk’. | ‘He broke- you your neck.’ |
| *XAN: | ju’uk. jaej? | ‘No. Huh?’ |
| *CAN: | ju’uk laj. | ‘No, it is said.’
[telling her what to say] |
| *XAN: | la -k’ech’- be -nuk’ alal. | ‘He twisted-off the doll’s neck for her. ’ |
| *CAN: | la -k’ok- be -nuk’ alal. | ‘He broke-off her neck for her. ’ |
| *XAN: | jo’. | ‘Yeah.’ |

...

- *CAN: *la -poj-be-t ch'um ek.* 'He stole-**you** squash too.'
la -poj-be-t ch'um. 'He stole-**you** squash.'
- *XAN: *laj.* 'He did.'
- *CAN: *sok jelol ek.* 'With your namesake, too.'
- *XAN: *sok.* 'With.'
- *CAN: *lot ek'i.* 'It's a lie, too.'
- *XAN: *-boj-be-n -k'ab xutax.* 'He cuts-**me** my hand, the scarecrow.'
- *CAN: *la -boj-be-t -k'ab xutax.* 'The scarecrow cut-**you** your hand.'
- *XAN: *jo'* 'Yeah.'
- *CAN: *aj. la -poj-be-t bel -tzek* 'He stole-**you** (your) skirt.'
- *XAN: *laj.* 'He did.'
- *CAN: *aj.* 'Ah.'
- *XAN: *laj.* 'He did.'
- etc.

These kinds of teasing routines are a characteristic feature of Tzeltal child-rearing (Brown 2002), and provide ample scope for practice with the BEN construction.

5.2. What is the prototype?

If we ask what are children's favored meanings for verbs used in BEN in the sampled data, do we find 'give' the predominant meaning at any stage? Note that *ak'* 'give/put' is by far the most frequent verb in the language likely to get used in this construction at this age (in terms of frequency it's one of the top ten verbs in the input; Brown 1998b). On grounds of frequency alone, therefore, we would expect it to predominate in this construction, and indeed, it seems that *ak'* with BEN achieves productivity (in the sense of occurring in all three persons) marginally earlier than other verbs.

Yet 'give' as a prototype should, according to Shibatani (1996), have as part of its meaning that the recipient exercises an element of possessive control over the theme (see (16) above). That does not seem to be the case across the range of verbs used by children in this construction (nor indeed for the adults).¹⁵ Looking in each sample for the range of favored meanings expressed in with BEN, for each child (see Table 5 below), we find that, although the three children differ in the verbs they use, all of them use non-transfer verbs in the construction from the beginning of our samples around

age two. It's hard to imagine, given the range of verbs represented in Table 5, that (à la Gleitman 1990) children insert 'transfer' into the semantic entry for each verb.

Table 5. Range of verb types used in BEN construction by the 3 children (numbers after verb indicate tokens in data sampled; verbs are listed in decreasing order of frequency of use by the children)

	LUS	XAN	MIK
Age 2	<i>poj</i> 'steal from' (15) <i>ak</i> 'give' (3) <i>tzak</i> 'take in hand' (2) <i>chol</i> 'exchange (clothes)' <i>al</i> 'tell' <i>kus</i> 'wipe' <i>ixlan</i> 'play with'	<i>puk</i> 'mix by hand' (3) <i>chuk</i> 'tie' (2) <i>ak</i> 'give' (2) <i>muk</i> 'cover with cloth' (2) <i>nup</i> 'blow on' (2) <i>ixlan</i> 'play with' (2) <i>poj</i> 'steal from' (2) <i>ti</i> 'bite' (2) <i>lo</i> 'eat' <i>boj</i> 'cut' <i>nit</i> 'pull on' <i>koj</i> 'knock against' <i>tij</i> 'push' <i>ich</i> 'receive' <i>pas</i> 'do/make' <i>k'as</i> 'break' <i>k'ech</i> 'twist off'	<i>pas</i> 'do/make' (2) <i>ak</i> 'give' (2) <i>k'ej</i> 'put away'
Age 2;6	<i>pas</i> 'do/make' (4) <i>ich</i> 'get' (4) <i>kuch</i> 'carry' (2) <i>potz</i> 'lok'el 'peel off' <i>k'as</i> 'break' <i>k'an</i> 'want/ask for'	<i>tilp'un</i> 'untie' (4) <i>k'ej</i> 'put away' <i>tzak</i> 'grasp' <i>butz</i> 'kiss' <i>kus</i> 'wipe' <i>tzot</i> 'twist' <i>al</i> 'tell' <i>k'an</i> 'want'	<i>chuk</i> 'tie' (13) <i>poj</i> 'steal from' (3) <i>jol</i> 'pierce' (3) <i>tij</i> 'push' <i>tzak</i> 'grasp' <i>utziy</i> 'smell' <i>kus</i> 'wipe' <i>sut</i> 'tightly bind' <i>al</i> 'tell'
Age 3;0	<i>man</i> 'buy' (8) <i>chuk</i> 'tie' (3) <i>tzis</i> 'sew' <i>ch'oj</i> 'throw' <i>mal</i> 'spill' <i>pak</i> 'stick on' <i>jip</i> 'throw' <i>t'otz</i> 'uproot'	<i>otzes</i> 'insert' (6) <i>ch'ol</i> 'pour' (3) <i>il</i> 'see' (3) <i>set</i> 'cut' (3) <i>ch'ay</i> 'drop' (2) <i>lok'es</i> 'extract' (2) <i>jom</i> 'pierce' (2) <i>jut</i> 'pierce' (2)	<i>tij</i> 'push' (5) <i>man</i> 'buy' (5) <i>jul</i> 'pierce' <i>bon</i> 'paint' <i>il</i> 'see' <i>lok'es</i> 'extract' <i>ich</i> 'get' <i>mal</i> 'spill'

Table 5, cont.

	<i>uch</i> 'drink'	<i>jep</i> 'cut in half'	<i>lot</i> 'insert'
	<i>pech</i> 'braid'	<i>jol</i> 'open'	<i>toy</i> 'raise'
		<i>xi</i> 'fear'	<i>jam</i> 'open'
		<i>k'iy</i> 'spread out to dry'	<i>lok</i> 'extract'
		<i>t'om</i> 'explode'	<i>ch'ak</i> 'hire'
		<i>bul</i> 'pull up by roots'	<i>poch</i> 'peel'
		<i>k'am</i> 'roll up'	<i>jut</i> 'pierce'
		<i>jitz' lok'el</i> 'slide out'	
Age 3;6	<i>tuch</i> 'hold up' (4)	<i>pech</i> 'braid' (3)	<i>nit</i> 'pull' (4)
	<i>le</i> 'look for' (3)	<i>toy</i> 'raise' (2)	<i>latz</i> 'stack' (2)
	<i>toch</i> 'peel' (3)	<i>lap</i> 'put on clothes'	
	<i>kotz</i> 'throw down' (2)	<i>xij ochel</i> 'insert'	
	<i>busk'in</i> 'spill'	<i>jot</i> 'scratch'	
	<i>xat</i> 'divide'	<i>tek</i> 'step on'	
	<i>tz'ista</i> 'fart'	<i>sew</i> 'cut'	
	<i>il</i> 'see'	<i>balan</i> 'roll'	
	<i>tz'ibu</i> 'write on'	<i>jux</i> 'file'	
	<i>tzul</i> 'slide'	<i>jip</i> 'throw'	
	<i>katz</i> 'chew'	<i>kem</i> 'dig'	
	<i>jis</i> 'scrape'		

6. Conclusion

While children's very first BEN forms may well be unanalyzed wholes (e.g., *pojben* 'steal-from-me', *tzakben* 'grab-from-me', *chukben* 'tie-for-me'), and initial acquisition may proceed on a verb by verb basis à la Tomasello's (1992) 'verb islands', Tzeltal children readily acquire wide use of the BEN construction very early, within a few months of the child's first morpheme combinations at the two-word stage (age 24 to 30 months).

There is no evidence that Tzeltal children have trouble expressing three-participant events; it seems likely that a dedicated construction with simple morphology makes the task easier. They do not utilize alternative solutions to expressing a third argument – for example with adjuncts – prior to tackling the benefactive construction. In general, transitivity and argument structure appear on the basis of data examined so far, to be relatively easy for Tzeltal children; they very rarely make transitivity errors (Brown 1998a), despite the fact that arguments are often ellipsed.

Children do not all show a preference for transfer meanings initially when using the BEN construction; (potential) transfer of possession is not the core of the constructional meaning. Rather, its meaning for them is something like: NP1 does something to NP3 to help/hurt NP2 (initially, usually 'me'). This is suggestive evidence that the culture-specific use of the BEN construction leads to early culture-specific meanings for the construction – not 'give' or 'transfer', but a much more general meaning along the lines of 'help/hurt Recipient/Affectee'. These are culture-specific in the sense that what 'counts' in the decision to use BEN is shaped by cultural knowledge and values. Appropriate use of the BEN construction requires cultural knowledge: what constitutes things you would want to happen as opposed to things that are not desirable. Many, but certainly not all of these, are universal. Thus, while we may presume that parents and children everywhere would agree it was undesirable to injure their bodyparts or steal things from each other, much more culture-specific knowledge is necessary to assess the pros and cons of other event types expressed using BEN by these Tzeltal children ('play with **you** your rope, pull **you** your shirt, tie/untie my car (etc) **for me**..., tie-it-tightly-up **for him** (head, for headache), eat-**me** my banana, eat **her** (younger sister) it (banana), bite-**him** (cat) his fur), smell-**him** it, see **you** your-crotch!' and 'Come pull-out-of-the-ground **for your aunts** their corn').

There is considerable cultural support available in caregiver's speech and behavior for learning the Tzeltal BEN construction. Not only do the things naturally expressed by the BEN construction (offers, threats, requests) tend to be culturally important kinds of speech acts for children, but also, children are early drawn into caring for other children, so they are often asked to do things for others. They also routinely bait each other with what they – and others – will do *to* each other. Early access to this meaning is supported by specific cultural practices, including routine control threats (Brown 2002), and other cultural routines like the scarecrow one illustrated in (55) above.

Furthermore, since there is no alternative phrasing possible (no possibility of saying something equivalent to 'I bought the book FOR Mary', utterances with BEN are reasonably frequent in the input. Perhaps if you have only one way of talking about a third participant, then you are more likely to generalize the construction rapidly.

Is there any relation between how the Tzeltal children are construing events with the BEN construction and how children express three-participant events in other languages? There is evidence from Billington (2002)

that English-learning children dissociate dative and benefactive constructions from a very early age, despite the fact that both can be expressed in the same two ways in English – either by a double object construction (*give him the book, make him a cake*) or a prepositional object construction (*give a book to him, make a cake for him*), indicating semantic priority for the benefactive.¹⁶ Demuth (1998, 2003) finds that 2-to-3-year-old children learning Sesotho productively use the applicative morpheme (of which one use is benefactive), and alternate with the same verb in applicative and non-applicative uses, showing some productive knowledge at an age comparable to that of the Tzeltal children examined here.

Of course, to explain exactly what is going on with the Tzeltal children's use of BEN, further questions need to be addressed in future work:

- i. What is the precise relation between the children's verbs and input verbs used in BEN: Is the children's usage exactly mirroring the adult input in this construction?
- ii. Do children use the same verb root in both transitive and ditransitive constructions at the same time point? (i.e., do they have a basic two-place or three-place meaning for each verb?) Do transitive uses precede ditransitive uses for each verb, or for any of the verbs?

The present paper takes the first step, establishing that Tzeltal children use BEN with a wide range of verbs and with a culture-specific meaning at an early age, well before age 3. These facts, and indeed the very existence of the construction they are based on – a three-argument construction which adds an extra argument to two-argument verbs (assuming we can independently establish verb transitivity, and provided the construction is frequent in the input) – suggests that there may not actually be any universal prototype for three-argument constructions. If virtually all transitive verbs can be construed ditransitively, then the fact that a verb occurs in the ditransitive construction cannot tell you anything about that particular verb's meaning. Children, then, have to learn how to take the relevant perspective, and what the local conventions are for adding a third participant when expressing an event.

Notes

1. This paper is based on a talk presented at the symposium on 'Language-specific influences on early semantic and cognitive development' at the Vth conference of the International Association for the Study of Child Language, Madison, Wisconsin, in July 2002. An analysis of part of the same data for two children was reported in Brown (1998b). The paper's current formulation also owes much to discussions and plans for a workshop in May 2003 at the Max Planck Institute for Psycholinguistics, which investigated the linguistic encoding of three-participant events from a crosslinguistic and developmental perspective (cf. Brown, Eisenbeiss & Narasimhan 2002; Narasimhan, Eisenbeiss & Brown 2007). I am grateful to Bhuvana Narasimhan and to an anonymous reviewer for extremely helpful comments on a first draft of the paper.
2. Tzeltal transcription conventions are based on a practical orthography; symbols correspond roughly to their English equivalents except that *j* = *h*, *x* = *sh*, and ' indicates a glottal stop or glottalization of the preceding consonant. Abbreviations for glosses are as follows: 1,2,3 ERG indicates 1st, 2nd, 3rd person ergative prefixes (which mark both subjects of transitive verbs and noun possessors), 1,2,3 ABS indicates the corresponding absolutive suffixes, 1PLE is 1st person plural exclusive, 1PLI = 1st person plural inclusive, PL = 2nd or 3rd person plural, ASP = neutral aspect, = BEN benefactive suffix *-be*, CMP = completive aspect, ICP = incomplete aspect, PREP = preposition.
3. In none of the child data under examination were there any examples of all three arguments being overtly expressed, and this is rare in adult speech too (Brown, in press). Note that Tzeltal should present a learning problem analogous to that presented by Sesotho (Demuth 1998, 2003), since word order differs depending on the status of the Agent and Patient arguments on the animacy hierarchy (if *A* = *P* the order is VAP; if *A* is higher than *P* the order is VPA (Dayley 1981: 43, 1990; Robinson 2002). This issue is not pursued here, as it would require a different methodology, including eliciting utterances with explicitly expressed arguments from children.
4. Kaufman (1971) calls it 'indirective'; Slocum (1948: 85) calls it 'benefactive-indirective,' Monod-Becquelin (1997) calls it 'benefactive'. Dayley (1981: 44, 1990) calls it a 'referential voice'. Berlin (1961ms: 59) says that 'it may occur with all transitive bases to indicate a second object other than the object inherent in the transitive verb base.' In work on the closely related Mayan language Tzotzil, Haviland (1988) calls it the benefactive or ditransitive suffix; Aissen (1974, 1987) calls it indirect object or ditransitive.
5. In the child examples, an initial hyphen – indicates missing ergative prefixes (cross-referencing Agent or Possessor); ergative and absolutive cross-referencing on the verb are obligatory in adult Tzeltal. An initial underline in front of the verb indicates a missing aspect marker, which is also obligatory.

6. One major exception to this is the English dative alternation, which has received more than its share of attention (cf. Osgood & Zehler 1981; Pinker 1989; Gropen, Pinker, Hollander, Goldberg & Wilson 1989; Goldberg 1995; Snyder & Stromswold 1997; Billington 2002).
7. In Tzotzil, a closely related Mayan language, BEN can apparently promote an instrument as well (Dayley 1981: 42):

Ta-0-s-paj-**b'e** **akuxa** ti ka7e
 ASP-ABS3-ERG3-prick-INSTR needle the horse
 'He pricked the horse **with a needle**.'

Since Dayley could not find a comparable example for Tzeltal, nor have I found any examples of instrument advancement in my data, this possibility is not considered further here.

8. I write these BEN suffixes as two morphemes – with *-be* for BEN and then the ABS suffixes – a decision required by details of plural morpheme ordering, although they are probably not taken as two distinct morphemes by young children.
9. It is not however, contra Dayley (1981: 44), obligatory, as the examples show. Note that the relation between possessive and benefactive is also crosslinguistically frequent, and provides the basis for grammaticalization route (Margetts 2004; Payne & Barshi 1999)
10. In the 'put' sense you can definitely use *ak'* 'give, put' without BEN (e.g., *ak'a ta mexa* 'put it on the table'). The root *ak'* has many light uses, and although it does occur in transitive sentences (i.e., without BEN), further linguistic analysis would be necessary to decide whether all the non-BEN uses of *ak'* have a meaning distinct from plain 'give'. Many other inherently three-argument verbs (with meanings like the English verbs *show*, *feed*, etc.), are complex verbs constructed with *ak'*: e.g., *ak'be yil* 'make him see, show him', or *ak'be slo'* 'give/make him to eat').
11. Native-speaker judgements here are based on elicitation with one experienced male consultant, age 48. Crosslinguistic evidence suggests there may well be variability in such native-speaker assessments for three-place predications.
12. Mayanists differ as to whether they analyze the BEN suffix singular forms into two morphemes, since the ending is transparently related to that of the absolutive suffixes and BEN is historically derived from proto-Mayan **-be* + absolutive suffixes. In Tzotzil and Tzeltal it is usually written as two suffixes, *-be* + *-ABS*, although (as mentioned above) synchronically the single forms are probably taken to be a single suffix by learners.
13. See O'Connor 1996 for an analogous argument for Northern Pomo possessor-raising)
14. In connection with a large-scale comparative project on spatial language and its acquisition, I videotaped six-weekly longitudinal samples of natural interaction from children in five Tzeltal families, focussing on children from around the age of 1;6 to 4 or later. I also had the parents tape-record monthly samples

between Sept. '94 and July '98. This data was collected between the years of 1993 and 1998 in the community of Tenejapa, in Chiapas Mexico. Analyses of other parts of this child language database are reported in Brown 1997, 1998a, b, c, 2001, 2002, 2004, in press; and in Brown & Levinson 2000. The structure of the database can be seen by consulting the Max Planck Institute for Psycholinguistics Browsable Corpus. [www.mpi.nl] Pioneering work on Tzeltal child language was carried out two decades earlier in the same community by Brian Stross (e.g., Stross 1970a/b, 1972, 1973).

15. Shibatani (1996: 191) actually suggests strict criteria for showing that his proposed schema is false, for a given language. One must show (1) that benefactive constructions are structurally different from the 'give' construction (which they are not, in Tzeltal), and (2) that benefactive constructions obtain more easily for situations remote from what is described by the 'give' situation than for ones that are closer to the schema. This too is probably not the case for Tzeltal.
16. Pye (p.c.) summarizes Billington's (2002) study of the acquisition of 3-place predicates in English as follows: Billington extracted data from the CHILDES samples analyzed by Pinker & Stromswald, and found that both of these investigators had failed to separate the dative and benefactive constructions. Gropen et al. (1989) claim that children acquire both alternations of the dative at the same point, while Snyder & Stromswald (1997) claim that children acquire the double object form first. Billington separated the datives from benefactives and showed that children acquire the double object form of the dative first, but the prepositional form of the benefactive first. She also found a discontinuity between the children's use of 2-place forms and 3-place forms of the same verbs. The children use 2-place forms of the verbs long before they use 3-place forms.

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