From Insubordination to Subordination in Child Language Acquisition: A Pragmatic and Constructional Bootstrapping Account

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1. Introduction

This paper examines L1 acquisition of clause-linking constructions in Japanese, paying particular attention to conditional constructions. The purpose of the paper is two-fold, empirical and theoretical: (i) to show the developmental path starting with insubordination (antecedent-only reduced constructions) and moving toward subordination (bi-clausal constructions); (ii) to explore the question of why acquisition goes from insubordination to subordination, contrary to the general path in diachronic grammaticalization (and constructionalization). Insubordination, in the present case, manifests itself in antecedent-only reduced conditional constructions. Subordination refers to typical full bi-clausal constructions. Figure 1 summarizes these key concepts and phenomena on the cline of subordination and insubordination.
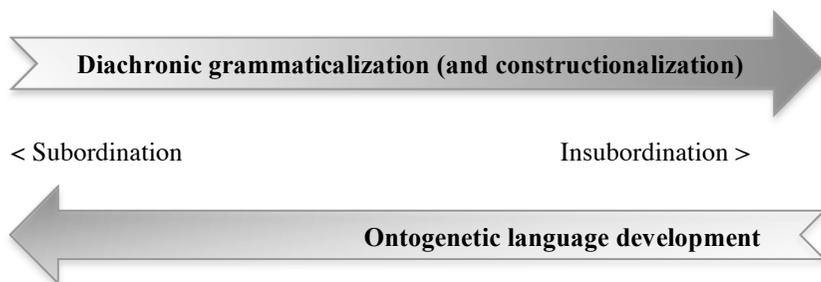

Diachronic grammaticalization (and constructionalization)

< Subordination   Insubordination >

Ontogenetic language development

Figure 1. The key concepts and phenomena

2. Background

It has been discussed that conditionals appear relatively early (before age 2) in Japanese L1 acquisition (Okubo 1967, Clancy 1985, Fujii 1993, 2001, etc., Akatsuka and Clancy 1993). This early emergence contrasts sharply with findings from other languages, which suggest that children acquire conditionals relatively late (Clancy, Jacobsen & Silva 1976, Reilly 1982). Akatsuka and Clancy (1993) argue that the affective meaning and cognitive accessibility of deontic

conditionals are responsible for the precocious emergence of conditional sentences.
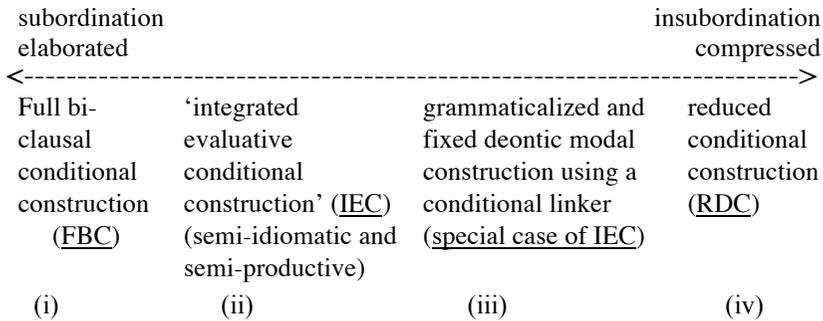
My study takes a constructional approach to the issue, and highlights the significant roles played by CONSTRUCTIONS in varying degrees of IDIOMATICITY that are associated with certain PRAGMATIC FUNCTIONS, in addition to the effects noted earlier of high frequency, accessible, affective meanings associated with deontic conditional constructions.

3. The present study
3.1. The target constructions: CONSTRUCTION TYPES and CONSTRUCTIONAL SCHEMES

This study has analyzed the ways children use conditional constructions in different CONSTRUCTION TYPES, which vary in (in-)subordination, and yet all share a certain CONSTRUCTIONAL SCHEME for conveying a certain pragmatic function. The present paper investigates children's language use, though the design of the analysis is based on my previous studies of adult language use (Fujii 1993, 1994, 1998, 2004, 2018, etc.).

This section briefly introduces the family of these target constructions, summarized in Figure 2 and Table 1. Examples in (1) and (2) below illustrate the CONSTRUCTION TYPES sharing the CONSTRUCTIONAL SCHEME of Suggestion/Advice and of Obligation, respectively.

subordination elaborated			insubordination compressed
<--->			
Full bi-clausal conditional construction (FBC)	'integrated evaluative conditional construction' (IEC) (semi-idiomatic and semi-productive)	grammaticalized and fixed deontic modal construction using a conditional linker (special case of IEC)	reduced conditional construction (RDC)
(i)	(ii)	(iii)	(iv)

Figure 2. Four construction types which vary in (in-)subordination along a continuum of clause-linkage (more elaborated to more compressed)

The CONSTRUCTION TYPES include: (from the left in Figure 2, and from the top in Table 1 and in each set of (1) and (2)) full bi-clausal construction(FBC), integrated evaluative construction (IEC) (including the grammaticalized idiomatic modal construction as the IEC's special case), and reduced antecedent-only construction (RCD) types, which vary on the cline of subordination to insubordination.

Table 1. CONSTRUCTIONAL SCHEMEs sharing pragmatic functions (across CONSTRCUTION TYPEs) (Fujii 1992, 1993, 2004, 2008, 2018, etc.)

Orthogonal networks	(horizontal) paradigmatic relations					
	(Examples of) CONSTRUCTION SCHEME					
vertical relations	Obligation	Prohibition	Recommendation	Permission	y	z
CONSTRUCTION TYPE						
full bi-clausal construction (FBC)	subordination		constructional schemes each conveying a pragmatic function			
Integrated-Evaluative Construction (IEC) (including idiomatic IECs)	Insubordination					
Antecedent-only reduced construction (RDC)						

(1) CONSTRUCTION TYPES sharing the CONSTRUCTIONAL SCHEME of
   Suggestion/ Advice

 (i) Full bi-clausal conditional construction (FBC)
  kono   kusuri   o   nomeba   naori   masu yo
  this   medicine   ACC take-COND((R)EBA)   cure/recover POLPART
  'If (you) take medicine, (you) will recover.'

 (ii) Integrated evaluative conditional construction (IEC)
    semi-idiomatic, semi-productive; **idiomatic (iii)**
  Kono kusuri   o   nomeba   ii   desu   yo
  this   medicine ACC   take- COND((R)EBA)   good   POL   PART
  'It will be good if (you) take this medicine.'

 (iv) Antecedent-only Reduced conditional construction (RDC)
  kono   kusuri   o   nomeba   ∅
  this   medicine   ACC   take- COND((R)EBA)
  Literal: 'If (you) take this medicine.'
   'You should take this medicine.' 'Why don't you take this medicine?'

   These different CONSTRUCTION TYPES all share a certain CONSTRUCTIONAL SCHEME associated with a pragmatic function. This is shown in the top row in Table 1: deontic modality of obligation, prohibition, Recommendation, permission, etc.
   Taking examples of (1), the integrated evaluative construction (IEC), such as (1-ii) 'It will be good if (you) take this medicine,' semantically conveys the sense of suggestion through the compositionality of the construction 'It is good if X.' Notice that a full bi-clausal utterance (in FBC), such as (1-i) 'If (you) take medicine, (you) will recover,' can also implicate the same pragmatic function of

suggestion, but only via an implicature. Finally, the antecedent-only utterances in Japanese, such as 'If (you) take this medicine,' also clearly conveys the sense of suggestion.

The same points can be made with examples (2) below, which illustrate another family of the same construction types, now with the constructional scheme of obligation. A full bi-clausal utterance (in FBC), such as (2-i) ' 'If (you) do not eat well, (you) will not grow,' can implicate the pragmatic function of obligation. The integrated evaluative construction (IEC), such as (2-ii) 'If (you) do not eat a lot, it will be no good,' semantically conveys the sense of obligation, through the composition of 'It is bad if not X.' In Japanese, the antecedent-only utterances such as 'If (you) do not eat a lot,' clearly conveys the sense of obligation; this meaning is in fact so closely associated with the antecedent-only reduced expressions that the form [P NEG *to*] 'if not P' is considered constructionalized and grammaticalized.

(2) CONSTRUCTION TYPES sharing the CONSTRUCTIONAL SCHEME of **Obligation**

   (i) Full bi-clausal conditional construction (FBC)
   takusan tabenai to   ookiku narenai   yo
   a lot   eat.NEG COND big   become.NEG PART
   'If (you) do not eat well, (you) will not grow.'

   (ii) Integrated evaluative conditional construction (IEC), semi-idiomatic,
      semi-productive; **idiomatic (iii)**
   takusan tabenai to   ikenai yo
   a lot   eat.NEG COND bad   PART
   Literal: 'If (you) do not eat a lot, it will be no good.'
   '(You) must eat well.'

   (iv) Antecedent-only Reduced conditional construction (RDC)
   takusan tabenai to   ∅
   a lot   eat.NEG COND
  Literal: 'If (you) do not eat a lot.'   > 'You should eat well.'

3.2. The question in L1 development

How do children acquiring L1 Japanese use and develop these different CONSTRUCTION TYPES, which vary in (in-)subordination, i.e., reduced, integrated evaluative, and full bi-clausal? This study has examined uses of these construction types in L1 Japanese children's utterances drawn from the CHILDES corpus (cf. Oshima-Takane & MacWhinney 1998).

The next section in the present paper will focus on the analysis of the child's uses of these construction types for the constructional scheme of 'obligation'.

4. How children start to use and develop different CONSTRUCTION TYPES in a certain CONSTRUCTIONAL SCHEME
4.1. The CONSTRUCTIONAL SCHEME of Obligation: The Sum corpus

This section shows how the child (named SUM) in the Noji corpus (Noji 1973-77) starts to use and develop the different CONSTRCUTION TYPES in the CONSTRUCTIONAL SCHEME of 'obligation'. SUM lives in Nagoya area, and is exposed to the Nagoya dialect, including the dialectal clause-linking forms N' TO, NA and NYA.

To convey the function of Obligation, SUM uses the N' TO construction (N' TO is a short form of NAI TO [NEG clause-linker 'not if']) as well as the NA construction and the NYA construction, before using the standard NAI TO [NEG clause-linker 'not if'] construction. (3) shows sample utterances of these **N'TO / NA / NYA** constructions.

(3) the **N'TO / NA / NYA** clause-linking constructions in **RDC, IEC** and **FBC** construction types with the CONSTRUCTIONAL SCHEME of 'obligation' (SUM (Noji), CHILDES)

the N' TO construction (2;02   IEC)
  *attame **n' to**   ikan   ne*
  warm NEG TO 'no good'   IP
  '(We) have to warm (it) (up).'

the NA construction (2;06   RDC)
  *ame konkon   hutteru kara   katya   sasite ika-**na**.*
  rain (onomatopoeia) fall because   umbrella use   go NA NEG&LINKER).
  'Since it is raining, we should go using an umbrella (i.e., 'we should take an umbrella).'

the NYA construction (3;00 FBC (DS, multi))
  *hayaku ika-**nya**   tooku made itte-simau   yo*
  early go NYA(NEG&LINKER)   far to   go ASP   IP
  'If you do not go soon, (they) will have (left and) gone far away.'

(4), (5), and (6) below show how SUM starts to use and develop the RDC, IEC and FBC construction types for the constructional scheme of 'obligation' with each of the N'TO / NYA / NA constructions respectively.

(4) **RDC, IEC and FBC construction types** in Constructional Scheme for
Obligation with the linker **N' TO** by SUM (Noji)

the N' TO construction

<div align="center">

IEC >   RDC / FBC
</div>

2;02	**IEC** *ikan* 'bad'		
2;04	**IEC** *ikan* 'bad' 4;	**FBC**	1
2;05	**RDC** 2; **IEC** 1;	**FBC**	1
2;06~2;11	**RDC** 2;	**FBC**	5
3;00~3;08	**RDC** 1; **IEC** 2;	**FBC**	12

To convey the function of Obligation, SUM starts to use the N' TO construction, first in Integrated Evaluative Construction with the negative evaluative predicate *ikan* 'bad,' at age 2 and 2 months, then the antecedent-only Reduced construction (RDC) without the main clause. The Full bi-clausal construction type (FBC) appears only later. This shows development starting from insubordination and then eventually subordination.

(5) **RDC, IEC and FBC constructions** for Constructional Scheme for
Obligation with the linker **NYA** by SUM (Noji)

the NYA construction

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       IEC    >   RDC     >  FBC      >  FBC      >  FBC
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2;03   **IEC** (*iken*)
2:06   **IEC**   (*ikan*)
2;07   **IEC** 5 (*ikan; tumaran*);   **RDC**   1
2;08   **IEC** 4   (*ikan*);   **RDC** 8;   **FBC** (one verb)   1
2;09~2;11 **IEC** 6 (*ikan*);   **RDC** 8;   **FBC** (SS, multi)   1
3;00~3;02 **IEC**   9 (*ikan,   tumaran*, *ikan,   dame*);
                                RDC 6;   **FBC** 2 (DS, multi   2)
3;03~3;05 **IEC** 12 (*ikan, ikan, ikemasen*); **FBC** 8 (DS, multi   1; SS, multi 1)
3;06~3;08 **IEC** 10 (*ikan. tumaran. dame*); **RDC** 9;   **FBC**   4

As summarized in (5), SUM also uses the dialectal form, NYA, to express the obligation function, first in Integrated Evaluative Construction, then antedecent-only Reduced Construction type, and finally Full Bi-clausal construction type. This shows development starting from insubordination and then eventually subordination.

As seen in (6), at age 2 and 3 months, the same child SUM also starts using the dialectal NA construction almost exclusively in Integrated Evaluative Construction, with just one example of the Reduced Construction.

(6) **RDC IEC and FBC construction types** in Constructional Scheme for
    Obligation with the dialectal NA construction SUM (Noji)

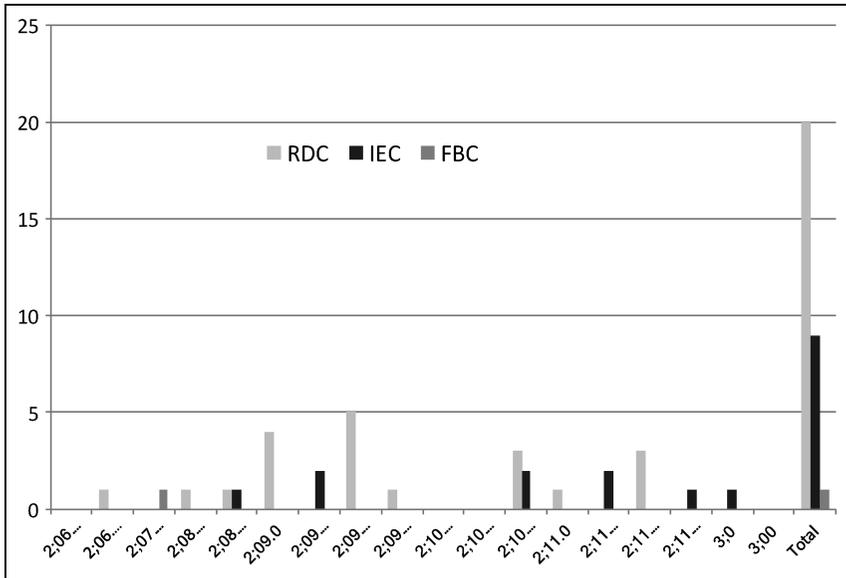   **the NA construction**

<div align="center">

IEC > RDC IEC
</div>

2;03	IEC *ikan* 'bad'	(by repetition)	
2;05	IEC *ikan*		
2;06	IEC *ikan*	4;	RDC 1
2;07	IEC *ikan*	4	
2;08	IEC *ikan*	2	

All these observations with all the linking forms show development starting from insubordination and then eventually subordination. Early IEC and RDC utterances are highly idiomatic and consistent in pragmatic function. Also notable is that the uses of full bi-clausal utterances initially convey the pragmatic function (here 'obligation') consistent with their IEC and RDC counterparts.

4.2. The CONSTRUCTIONAL SCHEME of Obligation: The Aki corpus

    Let us briefly look at how antoher child, AKI (Miyata 1995), uses RDC, IEC, FBC construction types with the linker TO in the CONSTRUCTIONAL SCHEME of Oblicatoin.

    Figure 3 shows how AKI uses RDC, IEC, FBC construction types with the linker TO in the CONSTRUCTIONAL SCHEME of Oblicatoin. The antecedent-only Reduced construction type emerges first, and prevails throughout the period. The Integrated Evaluative construction type is also used frequently and consistently, but not the full bi-clausal construction type.

Figure 3. Aki's uses of RDC IEC and FBC CONSTRUCTION TYPES in the CONSTRUCTIONAL SCHEME of OBLIGATION

4.3. The summy of the analyses

The analysis of the L1 data drawn from the CHILDES corpus shows: (i) Children start with the antecedent-only reduced construction (RDC) and the integrated evaluative construction (IEC), which precede the full bi-clausal construction (FBC). (ⅱ) Early IEC utterances are highly idiomatic and consistent in pragmatic function. RDC utterances (produced by children) also clearly convey specific pragmatic functions, and exhibit uniformity in using the same form of conditional clause-linking morpheme and the affirmative/negative value within the antecedent. (ⅲ) Finally, initially, bi-clausal conditional utterances convey pragmatic functions consistent with their IEC and RDC counterparts.

5. Conclusion and implications

To conclude the analysis, I argue that the pragmatic functions common among CONSTRUCTION TYPES serve to bootstrap the acquisition of the bi-clausal conditional construction. More crucially, what makes this bootstrapping possible is the overarching CONSTRUCTIONAL SCHEME that exhibits pragmatic and formal commonalities. I thus propose a constructional bootstrapping that supports a pragmatic bootstrapping as well as the morphological acquisition in RDC and IEC as a springboard for the more complex FBC.

This analysis accounts for the reversed path of insubordination to subordination in L1 acquisition. Diachronically, antecedent-only reduced constructions normally develop later, based on bi-clausal constructions in clause-linkage: that is, from propositional to textual and intersubjective. Language learning reverses the path from intersubjective and textual to propositional.

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