

The Realization of Indirect Objects and Dative Case in German

Manuela Schönenberger¹, Franziska Sterner¹, and Tobias Ruberg²

¹University of Hamburg and ²University of Bremen

1. Introduction

This paper discusses case marking on indirect objects in German. The focus is on constructions with ditransitive verbs involving two internal DP arguments, in which the direct object (DO) shows accusative case and the indirect object (IO) shows dative case. In the natural speech of young children ditransitive verbs occur infrequently, but when they do occur children occasionally omit the IO or realize it as a PP instead of a DP. Similar findings have been reported in studies of simultaneous or successive bilingual acquisition of German. Schmitz (2006) discusses the frequent omission of IOs in bilingual children simultaneously acquiring German and a Romance language. Rothweiler, Babur, and Kroffke (2007) note that successive bilingual children whose L1 is Turkish often use a PP headed by *für* 'for' to mark the recipient role of the IO. Given that ditransitive verbs are rarely used by young children, we tried to elicit this construction under experimental conditions. The objectives of our study were to uncover how often children with L1 German or early L2 German make use of the PP-strategy, and to examine case marking on the IO.

The paper is organized as follows. Section 2 outlines case marking in German and Section 3 summarizes previous findings on case marking by monolingual and bilingual children. Section 4 describes the experiment used to elicit constructions with IOs. Section 5 presents our experimental data from monolingual and successive bilingual children. Section 6 contains our conclusions.

2. Case marking in German

Case in German is often visible on determiners and attributive adjectives, and is sometimes visible on nouns, as shown in (1):

- (1) a. Der hinkende Hase überholt eine schnelle Schildkröte.
the limping rabbit overtakes a fast turtle
b. Eine schnelle Schildkröte überholt den hinkenden Hasen.
a fast turtle overtakes the limping rabbit

Subjects usually receive nominative case, and objects of transitive verbs like *überholen* 'overtake' receive accusative case. Comparing the subject DP *der hinkende Hase* in (1a) with the object DP *den hinkenden Hasen* in (1b) shows that the determiner, the adjective and the noun have different morphological endings. But in the DP *eine schnelle Schildkröte* there is no overt difference in morphology between (1a) and (1b), although the DP occupies the object position in (1a) and the subject position in (1b). Besides case, German also has number distinction (singular vs. plural) and three genders (masculine, feminine, and neuter). In our study we consider case on definite articles and pronouns. Definite articles and personal pronouns are suppletive. The possible forms of the definite article and the personal pronouns are shown in Tables 1a and 1b respectively. Note that demonstrative

* The authors gratefully acknowledge funding by the German Science Foundation (Deutsche Forschungsgemeinschaft, DFG).

pronouns are homophonous with articles. The forms in the shaded entries unambiguously encode a particular case for a given gender/number.

Table 1a: Definite articles

	singular			plural
	masculine	feminine	neuter	
nominative	der	die	das	die
accusative	den	die	das	die
dative	dem	der	dem	den

Table 1b: Personal pronouns

		nominative	accusative	dative
1 st person	singular	ich	mich	mir
	plural	wir	uns	uns
2 nd person	singular	du	dich	dir
	plural	ihr	euch	euch
3 rd person	singular	masculine	er	ihn
		feminine	sie	sie
		neuter	es	es
	plural		sie	sie
				ihnen

There is a fourth case in German, genitive, that is much rarer than the others, and that is acquired late by German children. Mills (1985) reports that monolingual children do not produce genitive-marked forms before the age of 6.

3. Previous findings on case marking in German

Eisenbeiss (2002) discusses the acquisition of case in German (and many other languages) in detail. She observes that nominative is acquired first, followed by accusative, and then dative. Eisenbeiss (1994) and Eisenbeiss, Bartke, and Clahsen (2006) note that monolingual children occasionally use accusative instead of dative, as in (2), but that they rarely use dative instead of accusative. Typically, verbs that assign two theta-roles assign the theta-role theme/patient to the internal argument, which also receives accusative case from the verb. But there is a small class of verbs that take one internal argument that does not receive the role of theme/patient. For example, the internal argument of *gehören* 'belong' receives the thematic role of possessor, and it receives lexical dative rather than structural accusative.

- (2) der hört (gehört) den noch nicht (Svenja)
 demonstrative.nom belongs demonstrative.acc not yet
 correct: der gehört dem noch nicht
 'this doesn't belong to this one yet'
 (Eisenbeiss 1994:289)

Eisenbeiss (1994) points out that four of the five children in her study sometimes used dative instead of accusative in double-object constructions if the DO immediately preceded the IO, as in (3a). No such overextension of dative occurred if one of the objects was either topicalized, as in (3b), or the two objects were separated by *auch* 'as well', as in (3c).

- (3) a. ich schenke der biene_{DO} dem hasen_{IO} (VP 4;2)
 I give the.dat bee the.dat rabbit
 correct: ich schenke die biene dem hasen
 b. und die wolle_{DO} geb ich der katze_{IO} (VP 4;2)
 and the.nom/acc wool give I the.dat cat

- c. ich schenke das gepäck_{DO} auch dem mädchen_{IO} (VP 3;8)
 I give the.nom/acc luggage also the.dat girl
 (Eisenbeiss 1994:289)

The monolingual children occasionally used PPs instead of DPs (see Eisenbeiss 1994, Eisenbeiss 2002, Eisenbeiss et al. 2006). As the following examples show, different prepositions were used:

- (4) a. für'n papa_{IO} sollste aber den_{DO} schenken (Carsten)
 for-the.acc father should.you ABER this.acc give
 correct: dem papa sollste aber den schenken
- b. und das das_{DO} schenk ich bei die jujana jana_{IO} (indianer) (Svenja)
 and this.nom/acc this.nom/acc give I by the.nom/acc Indians
 correct: das schenk ich den indianern
 (Eisenbeiss 1994:295)
- c. geb auch a(n) Pauline_{IO} (Leonie 9)
 give also to Pauline
 correct: (der) Pauline
 (Eisenbeiss 2002:397)

It is not clear how widespread is the use of PPs instead of DPs among monolingual German children. Eisenbeiss et al. (2006:21) studied spontaneous production data from five typically-developing German children and from five German children with specific language impairment (SLI). They found 31 examples with a preposition in the data from the typically-developing children and 11 in the SLI-data. They add that in most of these examples a PP instead of an IO was used, which implies that some of these examples did not involve IOs. They note that "case-marking errors on indirect object NPs are extremely rare. [And that] although some children experience difficulties expressing obligatory (third) arguments in target-like ways, this does not affect dative case marking in indirect object NPs" (2006:22).

Rothweiler, Babur, and Kroffke (2007) investigated the acquisition of case by six successive bilingual children with L1 Turkish. Three of these children were diagnosed as being language-impaired. At the time of investigation all six children had been exposed to German for 24 months, and the three successive bilingual children without SLI had acquired accusative case, but not dative. In their spontaneous speech data a few dative-marked forms did occur, but there was also overgeneralization of accusative to contexts requiring dative. Rothweiler et al. also examined some experimental data from these children (elicited in the experimental context described in Section 4), in which five of the children produced utterances with a PP instead of an IO DP. The two children without SLI who did so always used the preposition *für* 'for' to mark the recipient, while the three children with SLI also used other prepositions, such as *von* 'of', *in* 'in' and *zu* 'to', marking source/possession, location/direction and direction, respectively. The authors regard the use of these latter prepositions, which do not mark the recipient, as indicative of a semantic error.

To summarize, dative case is acquired last, and overgeneralizations of accusative to contexts requiring dative are observed. Both monolingual and bilingual children sometimes omit one of the internal arguments—often the IO—of ditransitive verbs, and they also sometimes use a PP instead of a DP to express the IO. Monolingual children with and without SLI are said to rarely produce case errors on IOs: these are usually marked as dative.

4. Experimental method and participants

Some of the data discussed in our study were obtained as part of a long-term project examining successive bilingual children with L1 Turkish.¹ One of the goals of this project is to discover whether the acquisition of another language starting between the ages of 3 and 4 differs from simultaneous bilingual acquisition (from birth). Considerable data have been collected from more than twenty children over several years. These data consist mainly of spontaneous speech data from free-play situations, but there are also some data from guided experiments. A specific experiment involving the majority of the children concerned the acquisition of case. We have recently collected additional data using a modified version of this experiment.

The aim of the experiment was to elicit different case forms from children: nominative, accusative and dative.² The following situation was set up: an experimenter introduced three finger puppets (differing in grammatical gender) and told the child that it was the birthday of each puppet and that they therefore expected to receive presents. A bag was presented to the child containing small items appropriate as presents. The child was asked to select an item from the bag and give it to one of the puppets, and to comment on the action. The experimenter demonstrated to the child how to proceed, using the construction in (5a). She repeated the action by giving another item to another puppet, again using the targeted construction. It was then the child's turn to present items and comment on her actions. The modified version of the experiment (i) involved fewer items (10 instead of 18), (ii) the verb *geben* 'give' was offered as an alternative to *schicken* 'give as a present', and (iii) the target sentence showed the order: SUB V IO DO, as in (5b), rather than SUB V DO IO.³ Moreover, the presents were not contained in a bag, but visible on a tray.

- (5) a. Ich schenke den Ball_{DO} der Maus_{IO}.
I give the.acc ball the.dat mouse
b. Ich gebe der Maus_{IO} den Ball_{DO}.
I give the.dat mouse the.acc ball

Table 2 gives an overview of the children whose data were used in the analysis. 'Age' refers to the age of the child at the time of the experiment, and 'ME' stands for 'month of exposure', which in the case of the monolingual children coincides with their age at the time of recording. We deliberately chose a wide age range. 'AO' refers to age of onset, i.e. when the child started to be regularly exposed to the L2, i.e. German. The AO is assumed to coincide with the child's entering a German-speaking kindergarten, since none of these children received much input in German before that date. Four children in each bilingual group participated in the experiment twice.

Table 2: Overview of child participants

Group	N of children	N of recordings	AO	Age	ME
L1 German	14	14		2;4-5;0	28-60
L1 Turkish	12	16	2;9-4;2	4;0-6;6	14-41
L1 Polish or Russian	9	13	2;10-3;9	4;7-6;0	13-37

Note that in Turkish, Polish, and Russian the IO of the ditransitive verb corresponding to *geben* is also marked as dative.

¹ The project is entitled 'Specific language impairment and early second language acquisition: differentiating deviations in morphosyntactic acquisition', directed by Monika Rothweiler. It is one of several projects of the Collaborative Research Center 538 at the University of Hamburg, funded by the German Science Foundation.

² The conceptual basis of this type of experiment was developed by Sonja Eisenbeiss (see Eisenbeiss, Bartke, Weyerts, and Clahsen 1994:14f).

³ If the IO is pronominal only the order in which the IO precedes the DO is allowed.

5. Experimental results from monolingual and successive bilingual children

In our analysis we concentrate on IOs. We considered all occurrences of IOs independent of whether the IO occurred in a complete utterance or in an elliptical utterance:

- (6) a. ich schenke den besen_{DO} das baby_{IO}. (Eser, L1 Turkish: ME 24,5)
I give the.acc broom the.nom/acc baby
- b. ig geschenke oma_{IO}. (Fikret, L1 Turkish: ME 15)
I give granny
- c. adult: Wem soll ich den Ring schenken?
'Who shall I give the ring to?'
- c'. child: die oma_{IO}. (Laura, L1 German: 3;2)
the.nom/acc granny

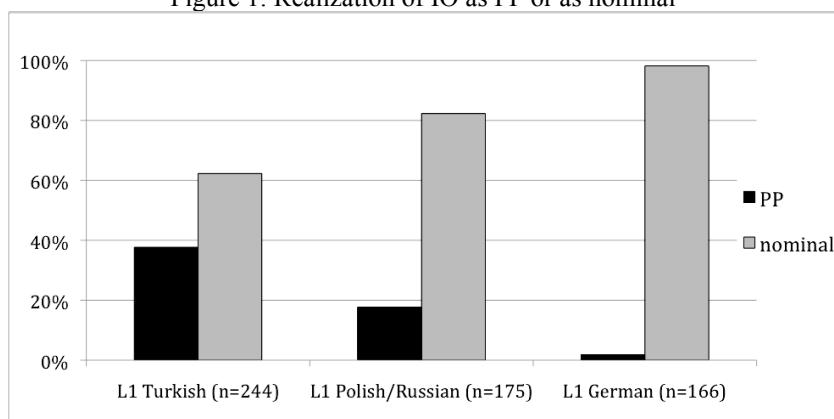
In the following sections, we discuss the occurrence of PPs in place of nominal IOs, the possible influence of word order on the use of PPs, and case marking on IOs, in order to address the following questions:

- Are successive bilingual children more likely than monolingual children to produce PPs instead of DPs to express the IO?
- Does the extent to which successive bilingual children use PPs depend on their L1?
- How frequent are case-marking errors on IOs?

5.1. PPs in place of DPs to express indirect objects

The successive bilingual children, and in particular the children with L1 Turkish, often used a PP to express the IO, while the monolingual children did not (see Figure 1). The differences between all three groups are highly significant (χ^2 -test, $p < .01$). The label 'nominal' covers DPs and bare nouns.

Figure 1: Realization of IO as PP or as nominal



The age range of the monolingual children in the experiment was quite broad (ranging from 2;4 to 5;0). There were only three examples with PPs in their data, and two of these were produced by the youngest child (age 2;4). Since we have no longitudinal data from these children we do not know whether any of the other children produced PPs instead of DPs at any stage in their linguistic development. We therefore scanned two German corpora available through CHILDES (MacWhinney 2000)—the Simone corpus (Miller 1979) and the Caroline corpus—for the different word forms of *geben* and *schicken*. We found 54 tokens of *geben* and one of *schicken* in the data from Simone (ages 1;9-4;0) and seven tokens of *geben* and 12 of *schicken* in the data from Caroline (ages 0;10-4;3). But only a few of these contain an IO, and in even fewer is the IO non-pronominal. There were three examples in Simone's data and four in Caroline's, but none contained a PP.

In our experimental data, seven different prepositions were used, but *für* 'for' and *zu* 'to' occurred much more often than any of the other prepositions, as shown in Table 3. The children with L1 Turkish had a preference for *für* and the children with L1 Polish or Russian had a preference for *zu*.

Table 3: Prepositions used in IO PPs

Group	<i>für</i> 'for'	<i>zu</i> 'to'	<i>bei</i> 'by'	<i>von</i> 'of'	<i>in</i> 'in'	<i>an</i> 'to'	<i>mit</i> 'with'
L1 German	2	0	0	1	0	0	0
L1 Turkish	53	26	4	3	3	2	1
L1 Polish or Russian	9	19	0	2	0	0	1

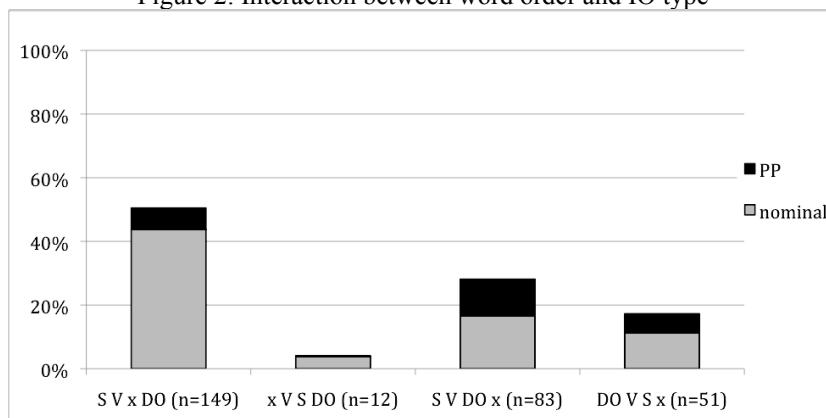
Some of the successive bilingual children were tested twice, and the preference for a given preposition was not necessarily the same in the two sessions. For example, Faruk (L1 Turkish) predominantly produced *zu* at ME 15, but only *für* at ME 24, and Fikret (L1 Turkish) used different prepositions at ME 15, but only *für* at ME 24,5. In general, the Turkish children used a wider range of prepositions than the other bilingual group, but they also used PPs more often. The observation that the typically-developing bilingual children used a range of different prepositions is incompatible with the observation by Rothweiler et al. (2007) that only SLI children do so.

Three of the bilingual children with L1 Turkish and four of the bilingual children with L1 Polish or Russian did not produce any PPs, although they used an IO in many of their utterances. It is unlikely that the absence of PPs in their data is due to their not having acquired any prepositions. Of these children we only have naturalistic longitudinal speech data from one child Eser (L1 Turkish). In the first recording, at ME 9, Eser already used five different prepositions.

We conclude that the tendency to express the IO of a ditransitive verb by a PP is quite pronounced in the bilingual children, independent of their L1, but that it is much more pronounced in the children with L1 Turkish. We could find no evidence for such a tendency in the monolingual children.

As can be seen from Figure 2 there is some interaction between word order and the occurrence of a PP in the bilingual children's data. The IO was more often expressed as a PP when it occurred utterance-finally than when it was topicalized or immediately preceded the DO. This difference was highly significant (χ^2 -test, $p < .01$). (The position of the IO is marked by x in Figure 2.)

Figure 2: Interaction between word order and IO type



We have no explanation for this finding, but note that there are similarities between the distribution of PPs in these child data and Norwegian. In Norwegian, which does not have case marking on nouns and determiners, the IO is expressed as a PP if it is in clause-final position, but it is expressed as a DP if it precedes the DO or it is topicalized. We do not know whether the bilingual children who embrace the PP-strategy in our experimental study will stop doing so once they have fully acquired dative.

5.2. Case marking on indirect objects

Case marking can surface on determiners (on certain nouns) and on pronouns. The children sometimes left out articles. Article omission was quite high in the L1 Turkish group (50/213=23%), lower in the L1 Polish/Russian group (23/160=14%) and quite low in the L1 German group (11/151=7%). In the bilingual group with L1 Polish or Russian article omission was particularly high in prepositional contexts, a context in which young monolingual children also often omit articles (see Eisenbeiss 2000). The occurrence of pronouns was quite rare in our experimental data.

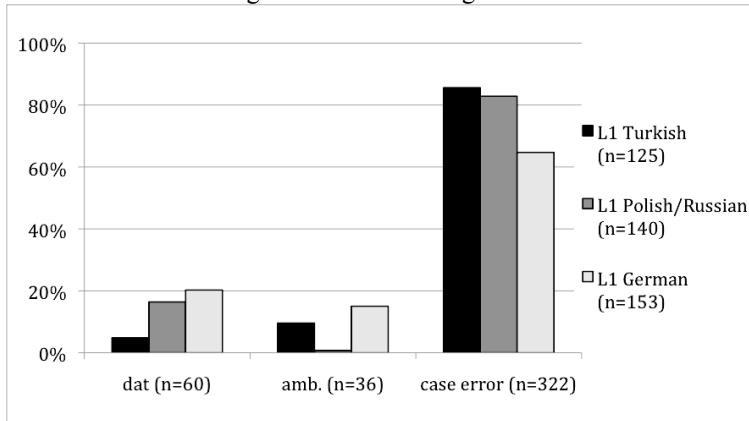
The association of variable grammatical gender with a given noun was more common among the bilingual than the monolingual children. As an illustration, Demir combined the masculine noun *Hase* 'rabbit' once with a neuter article form and once with a feminine article form:

- (7) a. un das hase schlaag (schenke) ich auch da. (Demir, L1 Turkish: ME 18)
and the-neut. rabbit give I also here
correct: und den hasen schenke ich auch IO
- b. interviewer: ich schenke
I give
- b'. child: die hase an die da (Demir, L1 Turkish: ME 18)
the-fem. rabbit an this-fem. one
correct: den hasen der da

The successive bilingual and the monolingual children produced many case errors, i.e. non-dative forms. In (8a) the child uses *das*, a form that could either be nominative or accusative, and in (8b) the child uses *den*, a form that is unambiguously marked as accusative. There were several examples in which the children used *der*, a form that is ambiguous between dative feminine and nominative masculine. Since the bilingual children do not yet master gender, *der* cannot be analysed as dative. Even the monolingual children occasionally used gender inappropriately, as in (8a) and (8c). The noun *Tiger* 'tiger' is masculine and the noun *Schwein* 'pig' is neuter. We therefore classified all instances of *der* as ambiguous in Figure 3.

- (8) a. ich schenke das slossel_{DO} auch das tiger_{IO} (Petra, L1 German: 3;5)
I give the.nom/acc-neut. key the.nom/acc-neut. tiger
'I'm giving the key to the tiger.'
correct: ich schenke den schlüssel dem tiger
- b. ich gebe den tiger_{IO} den auto_{DO} (Aleksandra, L1 Russian: ME 25,5)
I give the.acc-masc. tiger the.acc-masc. car
'I'm giving the tiger the car.'
correct: ich gebe dem tiger das auto
- c. ich möchte der maus_{IO} den schwein_{DO} schenken (Rieke, L1 German: 3;10)
I want the mouse the.acc-masc. pig give
'I want to give the mouse the pig.'
correct: ich möchte der maus das schwein schenken

Figure 3: Case marking on IO



Based on Figure 3, the following observations can be made. (i) The monolingual and the bilingual children do not produce many dative-marked forms or many ambiguous forms. Since the monolingual children generally, but not always, assigned the appropriate grammatical gender, the form *der* is more likely to be (+dat, +fem.) than (+nom, +masc.). If this is indeed the case then the monolingual children produce about twice as many dative-marked forms as the children with L1 Polish or Russian, who in turn produce more unambiguous dative forms than the children with L1 Turkish. (ii) The monolingual children—even the oldest—and the bilingual children produced many case errors: they used accusative or a form that cannot be unambiguously identified as being accusative in contexts requiring dative. These experimental data seem incompatible with Eisenbeiss et al.'s conclusion that German children have no difficulty with marking the IO as dative. Although not discussed here, the monolingual and bilingual children did not always correctly case mark DOs either.

6. Conclusions

The intent of our study was to investigate how children express indirect objects in constructions with the ditransitive verbs *geben* and *schicken*. We compared two groups of successive bilingual children with different L1s, and used a monolingual group for comparison. Based on our experimental results we reach the following tentative conclusions:

(i) Successive bilingual children often use PPs to express indirect objects. This behaviour was particularly pronounced in the children with L1 Turkish. Different prepositions were used, but there was a preference for *für* 'for' in the L1 Turkish group and a preference for *zu* 'to' in the L1 Polish/Russian group. Although many of the bilingual children followed this trend, seven did not produce any PPs.

(ii) No such trend was seen in the monolingual children. There were only three utterances with PPs, and two of these were produced by the youngest child. An examination of the longitudinal data from Simone and Caroline could not elucidate this point since there were not enough constructions of the relevant type. However, other studies report that German children also use this strategy to express indirect objects.

(iii) Word order appeared to influence the production of PPs. These were produced much more often in utterance-final position than when the indirect object was either topicalized or immediately preceded the direct object.

(iv) All three groups of children produced many case errors, overgeneralizing accusative to dative contexts, or using case forms that are ambiguous between nominative and accusative.

Whether the tendency to express indirect objects as PPs disappears once dative is fully acquired is a question awaiting future research.

References

- Eisenbeiss, Sonja. 1994. "Kasus und Wortstellungsvariation im deutschen Mittelfeld. Theoretische Überlegungen und Untersuchungen zum Erstspracherwerb". In Brigitte Haftka (ed.) *Was determiniert Wortstellungsvariation?* Opladen: Westdeutscher Verlag, 277-298.
- Eisenbeiss, Sonja. 2000. "The acquisition of DP in German child language". In Marc-Ariel Friedemann and Luigi Rizzi (eds.) *Acquisition of Syntax. Issues in comparative developmental linguistics*. London: Longman, 26-62.
- Eisenbeiss, Sonja. 2002. *Merkmalgesteuerter Grammatikerwerb. Eine Untersuchung zum Erwerb der Struktur und Flexion von Nominalphrasen*. Ph.D. Dissertation. University of Düsseldorf.
- Eisenbeiss, Sonja, Susanne Bartke, and Harald Clahsen. 2006. "Structural and lexical case in child German: evidence from language-impaired and typically developing children". *Language Acquisition* 13, 3-32.
- Eisenbeiss, Sonja, Susanne Bartke, Helga Weyerts, and Harald Clahsen. 1994. "Elizitationsverfahren in der Spracherwerbsforschung: Nominalphrasen, Kasus, Plural, Partizipien". *Theorie des Lexikons*. Arbeiten des Sonderforschungsbereichs 282.
- MacWhinney, Brian. 2000. *The CHILDES Project: Tools for Analyzing Talk*. Volume 1: Transcription format and programs. Volume 2: The Database. Mahwah, NJ: Lawrence Erlbaum Associates.
- Miller, Max. 1979. *The Logic of Language Development in Early Childhood*. Berlin: Springer.
- Mills, Anne. 1985. "The acquisition of German". In Dan Slobin (ed.) *The cross-linguistic study of language acquisition*. Vol. 1. Hillsdale NJ: Lawrence Earlbaum, 141-254.
- Rothweiler, Monika, Babur, Ezel, and Solveig Kroffke. 2007. Convergence of grammatical deficits in Specific Language Impairment (SLI) across languages? Case morphology in Turkish-German bilingual children. Talk presented at the Colloquium *Convergence and Divergence in Language Contact Situations*, 19.10.2007 in Hamburg.
- Schmitz, Katrin. 2006. *Erwerb der Verben mit zwei Objekten durch deutsch-französische und deutsch-italienische Kinder*. Tübingen: Narr.

Proceedings of the 11th Generative Approaches to Second Language Acquisition Conference (GASLA 2011)

edited by Julia Herschensohn
and Darren Tanner

Cascadilla Proceedings Project Somerville, MA 2011

Copyright information

Proceedings of the 11th Generative Approaches to Second Language Acquisition Conference (GASLA 2011)
© 2011 Cascadilla Proceedings Project, Somerville, MA. All rights reserved

ISBN 978-1-57473-445-4 library binding

A copyright notice for each paper is located at the bottom of the first page of the paper.
Reprints for course packs can be authorized by Cascadilla Proceedings Project.

Ordering information

Orders for the library binding edition are handled by Cascadilla Press.
To place an order, go to www.lingref.com or contact:

Cascadilla Press, P.O. Box 440355, Somerville, MA 02144, USA
phone: 1-617-776-2370, fax: 1-617-776-2271, sales@cascadilla.com

Web access and citation information

This entire proceedings can also be viewed on the web at www.lingref.com. Each paper has a unique document # which can be added to citations to facilitate access. The document # should not replace the full citation.

This paper can be cited as:

Schönenberger, Manuela, Franziska Sterner, and Tobias Ruberg. 2011. The Realization of Indirect Objects and Dative Case in German. In *Proceedings of the 11th Generative Approaches to Second Language Acquisition Conference (GASLA 2011)*, ed. Julia Herschensohn and Darren Tanner, 143-151. Somerville, MA: Cascadilla Proceedings Project. www.lingref.com, document #2554.