Dative Alternation: A Study on Iranian Children Acquiring Persian as Their First Language

Ali Panah Dehghani
Department of English, Kazerun Branch, Islamic Azad University, Kazerun, Iran

Firooz Sadighi
Department of English, Shiraz Branch, Islamic Azad University, Shiraz, Iran

Abdoreza Seyari
Department of English, Shiraz Branch, Islamic Azad University, Shiraz, Iran

Abstract
Research on English language acquisition as a first language indicates that dative alternations have been emphasized. Dative alternations are constructs which allow both double object dative as well as prepositional dative. A great deal of research has been done on dative alternation in English language. However, scant research has been conducted on Persian language. The alternation in word order in dative construction is shown to be different in Persian in comparison to English. Furthermore, more options or types are reported for dative alternations in Persian than English. Therefore, the current study focuses on the probability of using dative construction alternation among Iranian children learning Persian as their first language. The subjects of the study are eight children, males and females, aging 3.7 to 5 years old. The researchers employed an elicitation technique in which some of the most frequently used dative verbs were required to be utilized; they used some pictures and motivated the subjects to utter what they could perceive. Then, the data were collected and analyzed which indicated that Prepositional Dative (PD) types appear earlier than Double Object Dative (DOD) in Iranian children learning Persian as their first language.

Keywords: dative verbs, dative alternations, Iranian children, first language, Persian language

INTRODUCTION
The process of first language acquisition has been the focus of attention of many researchers during the last decades (Mahshie, 1997; French, 2007). Different methods, approaches, and theories have been published among which there are some similarities and differences in the findings and experiences. Behaviorists believed in child’s language acquisition through operant conditioning, reinforced by reward (a desired response by others). This view toward language learning was strongly attacked by
Chomsky (1959) by offering LAD. Chomsky (1959) found a new strategy for child language learning by opposing the behavioristic view that child’s mind is not a clear slate with no preconceived notion about language. As he argues, Skinner did not account for the syntactic knowledge of language. Chomsky speaks in favor of mathematical approach, based on syntax, to child’s language acquisition and refuses language acquisition through operant conditioning. Later, he introduced Universal Grammar (Cook & Newson, 1996) with some principles and parameters, arguing that there are some common features in all languages (NP) and some variations too (head first/last). From then on, acquisition of different aspects of language, specifically grammar and syntax, has been emphasized by researchers and practitioners, such as morphological order of acquisition, statistical language learning and the like.

In the process of language development, dative alternation has received great attention. Dative verbs take Theme and Recipient as post verbal arguments. Levin (2008, p. 142) argues that "recipients in English can be expressed either as a first object or as the object of the preposition "to". The main conditions in English dative constructions are: double post verbal arguments and transfer of information or objects.

There are verbs that can be appropriately used in both Double Object Dative (DOD), and Prepositional Dative (PD) constructions, but there are other verbs that are only felicitous in just one of the constructions. According to Bavin (2009), a verb like donate is only proper when it is used in a sentence as PD: (He donated his books to the library). Consider the given examples:


Both types of dative alternations are identical and well-formed in English, while for the following pairs, the second one is ill-formed. (Gropen, Pinker, Hollender, Goldberg & Wilson, 1989; Chung & Gordon, 1998):

a. John donated a book to the library.

b. *John donated the library a book.

Children are not provided with the negative evidence; that is, they are neither corrected nor taught the rule of a particular language to help them identify that a sentence such as (b) is ungrammatical. Then, if the child is not provided with the negative evidence, how is s/he able to distinguish ungrammatical from grammatical dative utterances? How does the child understand that the sentence (b) is unacceptable? How does s/he keep away from such ungrammaticality when the negative evidence is absent?

Gropen et al. (1989) point to learnability problem in this connection, one of which is dative alternation. Concerning the assumptions of productivity, negative evidence and arbitration, they state that the paradox arises as the combination of these assumptions. They argue that children are productive otherwise "they would never overgeneralize
because they would never generalize to begin with" (p.204). They reject child's accessibility to negative evidence by arguing that a parent's correction of a sentence that is generated by that rule leads to removing any over general rule. And finally, they maintain that the verbs that allowed a rule to apply, make an arbitrary list, otherwise," the child would apply the rule where it is mandated but not where it would lead to ungrammaticality" (p. 205).

It can be the characteristics of the verbs which help the child learn such rules in his/ her first language acquisition, and there is no general rule to be applicable to all verbs or to all languages. It is the verb which allows one or both alternation in a particular language, and it may vary from one language to another or may be the same. In some languages such as Chinese (Chung & Gordon, 1998), like English, verbs of giving (give) and communication (tell/ teach) occur in double object construction. They argue that verbs of consuming (drink/ spend) cannot occur in double object form in English but can in Chinese. Furthermore, they maintain that verbs of motion (bring), creation (make) and sending (send/ fax) do not dative in Chinese.

In response to the question that why the verb donated is felicitous in just prepositional dative, Bavin (2009) offers the given statements:

a) Children, specifically at the first stage of language acquisition, learn verbs in constructions they have heard them. Bavin (2009) believes that for the latter stage of language development, three to five years old, it is not true, because children overgeneralize at this stage of language learning.

b) The second reason is that adults correct child’s overgeneralization errors, but this is not true because adults do not do the correction explicitly and their responses to well-formed and ill-formed utterances of child is different.

To describe the variation in the arguments of di-transitive verbs namely double object construction verbs that are either followed by direct and indirect objects, or by a direct object and a preposition phrase, the term "Dative Alternation" is used. As mentioned, the former refers to double object dative (DOD), shown in (1a) example, and the latter to prepositional dative (PD), shown in (1b).

(1a): Jack sent [Joe] [a gift]. (NP + V + NP + NP)

(1b): Jack sent [a gift] [to Joe]. (NP + V + NP + to NP)

In both sentences "Joe", as indirect object and PD, has the thematic role Recipient, while "gift", as direct object in both cases, has a Theme role.

The preferred form by a child acquiring his/ her first language and the influential motive in the selection of either of the forms seems to be important which led some researchers to investigate the case.
Some previous research on English dative verbs supports the belief that children prefer to use double object datives rather than preposition datives (Campbell & Tomasello, 2001; Viau, 2006) perhaps because learning of prepositional dative is more difficult for the child at early age. Campbell and Tomasello (2001) contribute this to the greater frequency of hearing this construction by children. On the other hand, Conwell, O'Donnell and Snedeker (2011) argue that despite the fact that children hear double object datives more than prepositional datives and are able to produce them earlier, they have difficulty with their comprehension and production with novel verbs.

It is viewed that PD construction and DOD construction have the same meaning. That is, there are different syntactic forms with the same semantic forms. According to Krifka (2003) Aoun and Li (1989) prepositional object construction is derived and direct object construction is basic, while Larson (1988) has a different view arguing that prepositional object construction is basic and direct object construction is derived. Larson (1988, p. 335) argues that "a dative verb as in John sent a letter to Mary, is derived from a form in which the verb and indirect object make a constituent that exclude the direct object". Learning the range of usages of syntactic patterns that exist in a foreign language is one of the most demanding areas the language learners face (Krifka, 2003).

In English, however, children understand and use both dative constructions from the early stage, when they are able to utter two-word utterances. Among the given factors, Anderssen, Fikkert, Mykhaylyk, and Rodina (2012), argue that giveness is one of the main factors affecting word order. That is, when the Recipient is given, children use double object datives and when the Theme is given, they prefer prepositional dative. Furthermore, Bavin (2009) argues that the verb give is one of the most frequently used dative verbs at this early age.

The realization of the arguments limits the alternation, too. When the Patient is a pronoun, DOD is atypical (Paul sent Sara it), and when the Recipient is a pronoun, it is more usual than PD, (Paul sent her the book). Bavin (2009, p. 229) adds that "from a discourse perspective, the prepositional dative highlights the transfer event while the double object construction highlights the end state of transfer (usually possession of the Patient by the Recipient)".

**LITERATURE REVIEW**

Dative alternation construction is studied by many researchers during the past years (Aoun & Li, 1989; Larson, 1988; Conwell, O'Donnell & Snedeker, 2011). Most of the previous studies address English language and small number of studies are carried out on dative alternation constructions in other languages.

Andersszen, et al. (2012) conducted a study to investigate the degree to which Norwegian children are affected by giveness in dative alternation construction. Their research focused on children aged 4.2 to 6. They performed a semi-structured elicited
production procedure. The children were motivated to utter ditransitive verbs utterances where the Recipient and Theme have already been introduced. They found that children were sensitive to effect of givenness. That is givenness has a role of a dative alternation for Norwegian children. They reported that this sensitivity is due to either appropriate use of word order (PD vs. DOD), or the previously mentioned argument omission. They, also, concluded that general principles of pragmatics in a target-like way influences child grammar, although it is argued when the Theme is given, children produce PDs more likely than DODs.

Kang (2011) conducted a study on the acquisition of English dative constructions by Korean EFL children and found that although double object dative is shorter and is acquired earlier by native English-speaking children, Korean EFL children acquire prepositional dative before DOD. He, also, found that EFL Korean children allow scrambled dative structures. He suggests the effect of L1 transfer in this regard and argued that in Korean, word order is less important and by adding a morpheme a case is assigned.

Kendall, Bresnan and Herk (2011) carried out research on dative alternation in African American English and its variability within socially distinct English varieties and found that despite the previous research findings, there is no evidence to support the view that the dative alternation in African American English is considerably different from macro-regional standard of American English. They reported that dative alternation is not a sociolinguistic indicator. Based on their arguments, at least, to some extent, learners acquire their grammar according to linguistic experiences.

Levin (2008) studied three classes of dative verbs namely give, throw and send due to their distinguishing meaning components which in turn affect the range of prepositions they allow. Levin reported that there are some differences with these verbs when they receive to phrases. That is, locative wh- word, for instance, cannot be used for the verb give with to phrase:

* Where did you give the ball?
While for the verbs throw and send, to phrase may be:
  Where did you throw the ball? To the yard.
  Where did you send the bike? To Paris.

Levin (2008), furthermore, adds that the preposition to with give-type verbs, in contrary to send and throw, allow animate not inanimate complements:

Sara sent the book to Jack/ library.
Sara threw the ball to Jack/ the field.

but,
Sara gave the book to Jack/*New York.

More ever, the verb give is never used with the preposition from:

*Sara gave the book from jack.

Iwasaki and Misumi (2004) conducted a study on iconicity and viewpoint in determining word order in Japanese dative construction. They (p. 474) argue that "Japanese is a pro-drop language, and any arguments that can be inferred from the context can be non-overt". The findings of their study reveals that in dative clauses the prevalent word order of NPs was goal-patient order. "Goal NPs tended to be referential, animate, heavy and accessible". They, also, found that there were few instances of dative clauses in which both goal and patient expressed overtly. So, they based their analysis on written corpus. The goal patient order, as they found in few cases, seemed to disappear when patient was topic-worthy, particularly in cases where goal was inanimate. They did not publish the results of these cases due to its small instances.

For the current study, the researchers focused on investigating the earlier appearance of dative alternations in children learning Persian as their first language. That is, they conducted this study to investigate children’s responses to dative constructions in Persian to find out which forms, direct object, prepositional phrase, or both, are produced by Iranian children at the earlier stages of language learning. That is, the researchers attempted to find out which forms appear first in child’s speech in Persian. At first, we take a look at the features of some dative verbs (write, send and buy, which have been employed in this study) in Persian and English languages in brief.

In PD and DOD types in Persian, one usually uses the preposition "beh", means "to" with the NP "my father", for example, in the following sentences:

1. Man namehei ra beh pedaram neveshtam. (PD)
   
   I a letter to my father wrote.
   
   I wrote a letter to my father.

2. Man beh pedaram namehei (ra) neveshtam. (DOD)
   
   I to my father a letter wrote.
   
   I wrote my father a letter.

For other types of dative verbs the preposition may change to 'baraye" in Persian. For example:

1. Man baraye Sara jaabehei (ra) ferestadam. (DOD)
   
   I to Sara a box sent.
   
   I sent Sara a box.
2. Man jaabehei (ra) baraye Sara ferestadam. (PD)

I a box to Sara sent.

I sent a box to Sara

In sum, in Persian the preposition is not the same for all the given dative verbs, and it is, also, used in both PD and DOD types. Moreover, 'ra', the sign of direct object in these sentences in Persian, are sometimes recommended, optional or unnecessary in ditransitive sentences, depending on the dative verb.

The following expressions are, also, possible in spoken contexts in Persian:

Jaabehei ra baraye o' ferestadam. (A box to him I sent)

Baraye o' jaabehei (ra) ferestadam. (To him a box I sent)

For these two cases, it is difficult to argue that which dative alternation, DOD or PD, is emphasized by a child learning Persian as his/her first language although the first one is DP and the second one DOD. That is why the researchers, for a better and more reliable conclusion, adhered to the two previous forms, and based their assessment on those two. All the above forms are somehow common and in use by Persian speakers with the same semantic meanings. The given examples illustrate that for dative alternation constructions, Persian speakers are provided with a wider possible range of expressions. But since the current study does not directly aim at investigating the differences between the two languages concerning dative verbs, other instances are skipped. Just notice the following formula in Persian for dative constructions in formal spoken and written contexts:

### DP

<table>
<thead>
<tr>
<th>Np1 + V</th>
<th>Np2 + Np3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jack</td>
<td>sent a book to him</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Np1 + NP2+</th>
<th>NP3 + V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jack ketabi ra baraye o' ferestad.</td>
<td></td>
</tr>
</tbody>
</table>

### DOD

<table>
<thead>
<tr>
<th>Np1 + V</th>
<th>Np3 + Np2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jack</td>
<td>sent him a book</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Np1 +</th>
<th>NP3 +NP2 + V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jack baraye o' ketabi (ra) ferestad</td>
<td></td>
</tr>
</tbody>
</table>

By looking at the structures, it is evident that there is a change in the word order in DP and DOD constructions in both languages for NP2 NP3. Furthermore, as mentioned earlier, the word "ra" the sign of direct object in Persian, is sometimes necessary, recommended or optional in such sentences. The preposition is used in both constructions in Persian, as well.

**THIS STUDY**

This study aims at finding out Iranian children responses to dative alternation construction in Persian language. That is, the searchers are investigating the dative alternation types to identify if one form appears earlier than the other (DOD/ DP) in
Iranian children speech, or they both appear simultaneously. So, the current study relies on the given research question and hypothesis:

RQ: Which dative alternation construction does appear first in children’s speech learning Persian as their first language?

H₀. There is no significant difference in using dative alternations by children learning Persian as their first language.

**METHOD**

**Participants**

In this study, the researchers collected the data from eight Persian speaking children, age 3.7 to 5, in Iran. They were capable of perceiving and producing utterances in their mother tongue, Persian, with no difficulty. Both girls and boys were included in the study to achieve a more comprehensive conclusion, and to neutralize any possible assumption that one special gender acquires his/her first language earlier than the other.

**Procedure**

The researchers used an elicitation technique in this study by showing some pictures focusing on some di-transitive verb including give, show, throw, send, write, buy. The researchers provided an interesting and encouraging environment for the children to increase their willingness in the elicitation procedure. The children were given adequate time to express their own ideas about the intended pictures. The data were recorded in a written form for a better analysis. The researchers asked the children to produce what they see and perceive from the pictures. The pictures necessitated the production of dative alternation. In cases the children had problem(s) with explaining the pictures, the researchers elaborated on them and encouraged the participants to produce their own utterances, by raising questions like ‘what is s/he doing’? ‘What do you see in the picture’? and the like. If necessary, the experimenters provided the children with alternative ways of using the di-transitive verbs. They were, also, given a chance of uttering as sentences as possible although it was important for the researchers to notice which form(s), among the dative alternations, appeared earlier and which one latter in the child’s speech.

**Instrument**

The researchers used pictures in which somebody was doing something. They asked the children to utter what they can understand from the pictures. Elicitation technique was utilized and the participants were motivated to provide a sentence; these sentences required the production of dative alternations. Whenever necessary, the researchers provided different forms of dative alternations in Persian and asked the participants, individually, to choose the form(s) that were preferable to the child. Therefore, an
elicitation technique, by using pictures related to dative verbs, was employed in this study.

**RESULTS**

The obtained results from this study are solely based on the children's responses to the selected ditransitive verbs, therefore, the researchers do not overgeneralize the findings to all other dative verbs, in Persian. For the sake of remaining anonymous, as one of the ethics in research, the children are named A, B, C, ... according to their ages. The uttered alternations, produced by the children in Persian, were matched with their equivalents in English and then were categorized as DOD or DP alternations. The obtained data from every child is given separately and presented in the following Tables, where 1 stands for PD and 2 for DOD alternation types.

**Table 1.** Two male children aging 3.7

<table>
<thead>
<tr>
<th>Child</th>
<th>Give</th>
<th>Show</th>
<th>Throw</th>
<th>Send</th>
<th>Write</th>
<th>Buy</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

**Table 2.** Two female children aging 4

<table>
<thead>
<tr>
<th>Child</th>
<th>Give</th>
<th>Show</th>
<th>Throw</th>
<th>Send</th>
<th>Write</th>
<th>Buy</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>D</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

In the above Table, both girls, C and D, used PD for most of the specified dative verbs with an exception of the verb "throw" for which female children preferred DOD type. More ever, for the verb "show" one child preferred PD and another one DOD. This, in turn, suggests the appearance of the two alternation forms in the child early speech in Persian for the verb "show".

**Table 3.** Two male children aging 5

<table>
<thead>
<tr>
<th>Child</th>
<th>Give</th>
<th>Show</th>
<th>Throw</th>
<th>Send</th>
<th>Write</th>
<th>Buy</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

In Table 3, the participants preferred PD for four types of the dative form. For another verb, "throw", DOD is used and for the dative verb "write", both alternation types were shown to have been appeared in child's early speech.

**Table 4.** Two female children aging 5

<table>
<thead>
<tr>
<th>Child</th>
<th>Give</th>
<th>Show</th>
<th>Throw</th>
<th>Send</th>
<th>Write</th>
<th>Buy</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>H</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
The data obtained from the female participants in the above Table namely G and H, shows that for the verbs "send" and "write" the PD form and for "throw" and "buy" DOD alternation dative types appeared earlier in their speech. For the other two dative verbs, both types were used.

Table 5. The participant overall performances

<table>
<thead>
<tr>
<th>Child</th>
<th>Give</th>
<th>show</th>
<th>throw</th>
<th>Send</th>
<th>write</th>
<th>buy</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>C</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>D</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>E</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>G</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>H</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 5 demonstrates the overall performances of the participants in selecting the dative alternation types, which represents that age; from 3.7 to 5, has no impact for the earlier appearance of either type for some of the given dative verbs. As it is shown, PD is proved to have been uttered more frequently, and appeared earlier, than DOD by Iranian children learning their first language for most ditransitive verbs.

**DISCUSSION AND CONCLUSION**

In this study, it was revealed that both types of dative alternations were used by the Iranian children learning their L1, Persian. Types of the verb may have an effect on the earlier appearance of PD or DOD types. To illustrate the point, each verb is analyzed, taking advantage of Table 5, as follows: For the verb give, seven out of eight participant, males and females, regardless of their age used PD type which suggests that this alternation type for this type of verb is 87.5%.

For the verb show, just for two cases female participants, (one with the age of four and another five-year old) produced DOD type. That is six participants (all male along with two females in both specified age ranges) have preferred PD form. It is concluded that for this type of verb, the subjects used PD in 75% cases and DOD for 25%.

The situation is different to a great extent for the verb throw. Just two male children with the age of 3.7, produced PD type and the other participants made use of DOD form. The result may be due to the feature of this verb in Persian, as an action verb. It is argued that participants used DOD in 75% cases. All the participants produced PD alternation form uniformly (100%) for the verb send. For no participant in this study DOD was shown to have been developed in his/her early speech.

For the verb write, just one boy used DOD type, and the result from the rest subject signifies the earlier appearance of PD form. The percentage of producing PD type for
this dative verb is 91.5%. Finally, for the verb *buy* five participants produced PD form and three children made use of DOD type. It was revealed that for the given dative verbs, children used PD for 62.5%.

In sum, the null hypotheses is rejected and it is concluded that the participants were shown to have developed PD alternation type earlier than DOD in the process of learning Persian as their L1 for the most given dative verbs, except for the verb *throw*. This index was shown to be somehow the same, with little changes, for the most children with different ages.

The researchers suggest another study addressing more dative verbs. Furthermore, a thorough investigation of the early stages of learning dative construction in child language development in different languages is suggested to investigate any possible similarities and differences that may exist in those languages for the production of dative alternations. The social class of the child may also affect his/her production and selection of dative type, therefore, another study which addresses children’s low, middle and high social classes is suggested.

REFERENCES


