This study investigates how native Turkish-speaking participants of different ages produce new referents in narrative discourse about a 6-frame picture series. Turkish does not obligatorily encode the distinction between indefinite and definite reference with a formal article system. The expression of indefiniteness is instead achieved through a conglomeration of devices, including an optional indefinite numeral, case-ending variation, and word order. The main motivation of this study was to specify the means and the extent of indicating the nondefinite status of newly introduced story participants by Turkish narrators of different ages. The results indicate that Turkish children, similar to young speakers of other languages, do not exhibit a tendency to mark the indefinite status of referents until around 7 years of age. The centrality and animacy of the story characters constrain the introductory referential strategies of speakers. The implications of these findings are discussed in a cross-linguistic developmental framework.

One of the primary issues in the study of discourse processes is how people use linguistic strategies to refer to entities. Communication, to be deemed successful, requires that speakers clearly convey who or what they are talking about. In all languages, speakers can denote objects using their names, demonstrate them using deictic expressions such as this or that, or use definite descriptions to characterize the entity they intend to refer to. The specific form that a referring expression takes...
depends on the speaker’s assumptions about the addressee’s awareness state regarding a referent in the particular context in which the referent is mentioned. Identifiability of referents becomes a major communicative concern, especially in speech situations in which the only access of a listener to a particular universe of discourse is through the language provided by the speaker. Identifiability concerns the ability of the addressee to establish a link between the referring expression used by a speaker and the concept it refers to.

Speakers bear the responsibility of formulating their utterances in line with their judgments regarding identifiability of referents, employing context-derived assumptions of what their hearer has mental access to. Discourse linguists (Chafe, 1976; Du Bois, 1980; Givón, 1989; Lambrecht, 1994; Prince, 1981) have proposed that it is this semantic–pragmatic feature of referent identifiability that underlies the distinction between indefinite and definite articles, in particular, and indefinite and definite referring expressions, in general. According to Chafe (1976), if the speaker assumes that the hearer already knows and can identify the particular referent that he or she has in mind, he or she can employ definite linguistic expressions such as nouns preceded by definite articles. Otherwise, in the case of presumed nonidentifiability, the speaker commonly resorts to indefinite expressions to mark the introduction of the new referents both into the consciousness of the addressee and into the universe of the discourse.

The issue of how reference is managed in discourse production (and comprehension) is crucial for research on discourse processing because “it is fundamental in understanding the relationships among cognitive processes, knowledge integration, and information management” (Tomlin, Forrest, Pu, & Kim, 1997, p. 77). Proper initial identification of referents is not only crucial for the addressee to determine what the narrator has in mind, but also for the narrators to structure their own discourse. According to the deictic center theory of Zubin and Hewitt (1995), stories are “self-contained” discourse structures that do not highly presuppose the current interactional context of the teller and the audience. Labov (1972; Labov & Waletzky, 1967) also defined narrative as a bounded unit in discourse with a fairly characterizable structure that is, for the most part, independent of how it is embedded in the surrounding talk. According to the Labovian “variation analysis” of narrative (Schiffrin, 1994), the structurally identifiable section called the orientation typically describes introductory information such as time, location, and identity of characters. This orientation section is argued to be very important in terms of providing motivation and background for the upcoming main sections of the narrative. Therefore, in both deictic center theory and variation analysis, specifying the participants of the story world underlying the events of the narrated story right from the beginning facilitates further unfolding of the discourse content and structure.

A particularly fruitful approach to the study of the expression of indefiniteness has been to elicit monologic narratives from speakers of different ages using either picture prompts (e.g., Bamberg, 1987; Dasinger, 1995; Hickmann, 1982, 1995;
Hickmann, Hendricks, Roland, & Liang, 1996; Karmiloff-Smith, 1979; Küntay, 1995; Nakamura, 1993; Smoczynska, 1992; Warden, 1981) or animated video segments (e.g., Chafe, 1980; Clancy, 1992). Picture-based stimuli limit the number of potentially referable entities and, especially within the framework of a narrative plot, offer a standard content base for participants’ storytelling. Berman (1995) proposed that picture series and wordless picture-book stories offer nonverbal cues that scaffold young children’s storytelling. Also, as opposed to studies in which children are asked to describe series of individually presented pictures by isolated utterances (e.g., MacWhinney & Bates, 1978), storytelling tasks involve presenting referents into extended discourse constructed by the narrator. By using a series of pictures to elicit narratives, comparable discourse samples can be collected from speakers over a wide age range, offering grounds for studying the developing nature of discourse competence.

One of the main discourse organizational tasks facing a speaker to tell a story based on a sequence of pictures is to introduce characters in accordance with the listener’s informational needs. New referents must be presented in such a way that the speaker presupposes no prior knowledge with respect to their denotation on the part of the listener. The developmental course of this social-cognitive-linguistic function has been deservedly subject to considerable research attention. However, most of this research has focused on languages from the Indo-European family, conceivably because of the saliency of articles as a distinct grammatical element offering formal systems of differentiating indefinite reference from definite reference. Naturalistic and experimental studies in English and French have demonstrated a relatively protracted development for the mastery of appropriate introduction of referents for the listener to arrive at identification (Brown, 1973; Karmiloff-Smith, 1979; Maratsos, 1976; Warden, 1981).

Although the discourse-pragmatic function of presenting previously unidentified referents into speech is universal, different languages offer a varying range of linguistic devices for manifesting this function. The studies of the development of the marking of referent identifiability in languages without an obligatory determiner system are relatively new compared to those with languages with article-like systems that fairly clearly mark the referent status of nominals. Nakamura (1993) analyzed Japanese children’s and adults’ strategies for presenting new referents into picture-book narratives, focusing on the use of postnominal particles wa and ga. Clancy (1992) used a video-based prompt to investigate Japanese children’s referent identification abilities by use of a nominal versus ellipsis. These studies showed that the particle ga, which functions as the indefinite article, is late to emerge as a character introductory tool (Nakamura, 1993), and that nominal introductions showed a significant increase from the narratives of 3- and 4-year-old children to the narratives of 7-year-olds (Clancy, 1992).

In Mandarin Chinese, the marking of (in)definiteness is primarily realized through word order devices, in which new referents should obligatorily be placed
postverbally, whether they are prefaced by local article-like elements or not. Hickmann and her colleagues (Hickmann, 1995; Hickmann et al., 1996; Hickmann & Liang, 1990) conducted a series of studies with Chinese children at the ages of 4, 7, and 10, as well as adults using two picture sequences that included stories involving different kinds of animal characters. Their findings indicate a tendency for young Chinese children to prefer nominal level, article-like elements to express referent identifiability, demonstrating a more prolonged developmental period for using word order devices. Hickmann et al. (1996) also compared Chinese children’s preferences for introducing new referents into discourse to those of English, French, and German speakers of comparable age groups. The results indicate that although child speakers of languages with a formal article system (i.e., English, French, and German) performed at adult levels at around 10 years of age, the Chinese children of the same age were using many more inappropriate first mentions than Chinese adults. The authors interpreted these findings as indicative of a more protracted course of development for global markings of referent identifiability such as indicating information status at the level of the clause through word order devices.

Dasinger (1995) turned to Finnish to study referential (in)definiteness developmentally in picture-story narration. As opposed to article-bearing languages, Finnish does not express (in)definiteness through a single, compact strategy. Instead, Dasinger pointed out, the expression of this discourse function is distributed across a variety of multifunctional devices, including case distinctions, word order, and optional lexical items. The study found that the young children provided explicitly definite forms in discourse contexts calling for indefinite noun phrases (NPs) until around 8 years of age. In addition, Dasinger reported—similarly to Hickmann et al. (1996) in Chinese—a gradual replacement of the inappropriate bare preverbal subject NPs in initial introductions with more appropriate lexically indefinite postverbal NPs.

Another language without an obligatory determiner system in which developmental studies of the linguistic expression of (in)definiteness has been done is Warlpiri. Bavin (1987, 1999) described the development of referential strategies based on data from picture-book narratives from Warlpiri children of 4 to 12 years of age. The results indicated that children younger than 6 years and 6 months (6;6) mostly used ellipsis to specify story participants, whereas children over 6;6 tended to use full nominal phrases to present new referents into their discourse.

To summarize, as for languages employing formal article systems, research with speakers of nonarticle languages point toward relatively late emergence of marking indefiniteness of new referents in discourse. Child speakers of languages that use word order devices to specify information structure appear not to exploit these devices until relatively late, instead employing optional markers of (in)definiteness at the level of the NP. These studies in languages without an obligatory determiner system are very illuminating and enunciate the need for extensive re-
search in other such languages. In this article, I undertook to address this need by examining data from the Turkish language, which has an optional determiner system such that new information need not be marked by an indefinite determiner.

In this article, I investigate the preferred linguistic strategies that Turkish narrators of different ages use in carrying out the function of introducing story participants into discourse. Devices that mention different story characters for the first time in picture-based narratives are analyzed both in terms of lexical form and position within the clause. Before I turn to the description of the method, I briefly describe the linguistic strategies for indicating discourse status of referents in Turkish.

**EXPRESSION OF INDEFINITENESS IN TURKISH: A LINGUISTIC OVERVIEW**

The notions of definiteness, indefiniteness, and nondefiniteness need to be defined at outset. If the speaker believes that the hearer is already aware of and can identify the referent that he or she is referring to, the NP representing the referent will be assigned the discourse status of *definite*. If the speaker believes that the hearer can not identify the referent he or she has in mind, then the NP representing the referent will be assigned the discourse status of *indefinite*. In some cases, the identifiability of the referent is not at issue, especially when the speaker is interested in expressing the class membership of the referent as in *balon istiyor* “he wants [a] balloon,” or when the referent constitutes an integral part of the meaning of the verb such as in *kitap okuyor* “he is reading [a] book” or “he is doing book reading.” Following Dede (1986), such referential expressions will be referred to as *nondefinite*.

The expression of (in)definiteness in the Turkish language shares resources with devices within the systems of lexicon, case assignment, and word order. These devices may act singly or in combination with one another to indicate the discourse status of a referent, if the function is overtly marked at all. First, the nominal forms that fulfill the grammatical role of sentence subject will be taken up, followed by arguments in nonsubject grammatical roles.

Nominal subjects in Turkish are expressed by zero-marked NPs (i.e., the nominative case). Turkish has no obligatory articles that determine the status of definite versus indefinite nominal subjects. However, the numeral *bi(r)* “one” can be regarded as an optional marker of indefiniteness (Dede, 1986). The following examples are illustrative. It should be noted that all of the examples presented in this section to illustrate linguistic phenomena (except Example 4) are taken from the data set analyzed for this article. The ages of the speakers are designated in the part preceding the period in the square-bracketed codes, next to the English translations. Adults are indicated as such. The abbreviations used in the morphological glosses are described in Appendix A.
The presence of the indefinite numeral *bir* in Example 1 signals that the following entity is newly introduced for the listener. The absence of *bir*, as in Example 2, leaves the indefiniteness status of the relevant noun unmarked, leaving it to the situational context, or the listener's inferential system, or both, to fill in the information.

As for nouns in nonsubject grammatical roles, case endings become relevant to the interpretation of definiteness in addition to the indefinite numeral. Erguvanlı-Taylan and Zimmer (1994) laid out four distinct direct-object constructions that are differentiated in terms of the parameters of definiteness:

1. Definite direct objects, as in (3), in which the head noun of the object NP is marked with the accusative suffix -(y)I.

   (3) *bir gün bi çocuk ev-in-den çık-müş*
   
   one day INDEF child house-GEN-ABL go.out-EVID
   ‘One day a child went out of his home’
   
   *birden baloncu-yu gör-müş*
   suddenly balloonman-ACC see-EVID
   ‘Suddenly saw the balloonman’ [07.d]

2. Indefinite direct objects with the indefinite article *bir* and with accusative marking on the head noun, as in (4).

   (4) *adam bir doktor-u arı-yor*
   
   man INDEF doctor-ACC look.for-PROG
   ‘(The) man is looking for a (specific) doctor’ [constructed example]

3. Indefinite direct objects with the indefinite article *bir* and no case marking on the head noun, as in (5).
(5) git-miş
   go-EVID
   ‘(The child) went’
   
   **bir baloncu gör-iyor**
   INDEF balloonman see-PROG
   ‘(He) sees a balloonman’ [09.i]

4. Indefinite direct objects with neither an indefinite article nor any case marking on the head noun, as in (6).

(6) **bir çocuk yürü-yor-muş**
   INDEF child walk-PROG-EVID
   ‘A child was walking’
   
   **baloncu gör-müş**
   balloonman see-EVID
   ‘(He) saw (a) balloonman’ [05.e]

As Examples 3 to 6 demonstrate, lack of accusative marking on a direct object indicates that the argument is indefinite. On the other hand, presence of accusative case marking indicates definiteness.

Oblique objects with ablative, dative, locative, or instrumental endings are interpreted as definite in Turkish unless they are preceded by the indefinite numeral **bir**. Examples 7 and 8 illustrate definite and indefinite oblique objects, respectively.

(7) **şimdi burada bi tane çocuk var**
   now here INDEF child exists
   ‘Now here there is a child’
   
   **ev-den çık-yor**
   house-ABL go.out-PROG
   ‘goes out of the house’
   
   **baloncu-dan bir balon al-yor kırımı**
   balloonman-ABL INDEF balloon buy-PROG red
   ‘(He) buys a balloon from the balloonman, (a) red (one).’ [07.b]

(8) **gid-yor**
   go-PROG
   ‘(He) goes’
   
   **sonra bir tane baloncu-ya rastl-yor**
   then INDEF balloonman-DAT run.into-PROG
   ‘then (he) runs into a balloonman’ [05.d]
Table 1 summarizes the discourse status that could be gleaned from nominal forms that are in different grammatical roles in Turkish as an outcome of being prefaced by the indefinite numeral \( \text{bi(r)} \), or being case marked, or both.

In addition to noun-level markers of discourse status, the Turkish language exploits word-order variation to express different information structures governed by the rules of conversational pragmatics. Although the canonical word-order typology is subject-object-verb, it is generally agreed that simple Turkish sentences have the following pragmatically determined word order (Dede, 1986; Erguvanlı, 1984):

<table>
<thead>
<tr>
<th>topic</th>
<th>focus</th>
<th>predicate</th>
<th>background</th>
</tr>
</thead>
<tbody>
<tr>
<td>New referents in discourse are never postposed but usually placed in the focus position immediately preceding the verb, whereas topics usually occupy the clause-initial slot. The postverbal position is reserved for continuing and backgrounded participants. An example in which the “balloon” becomes backgrounded through postposing is in (9).</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(9) \( \text{balon-la beraber y"ur"ürken} \)  
ballon-INST with walk-GER  
‘While walking with the balloon’

\( \text{el-in-den kaç-tr-tyor balon-u} \)  
hand-GEN-ABL escape-CAUS-PROG balloon-ACC  
‘(He) lets the balloon escape’ [Adult.e]

As in Finnish (Dasinger, 1995) and Mandarin Chinese (Hickmann et al., 1996), the position of the referential term with respect to the verb contributes as an important factor to the marking of information structure. However, if the (in)definiteness of the referent is indicated by some other strategies such as noun-level determiners, then the position of the NP plays less of a significant role.

Apart from nominal-level markers and clause-level markers of word order, semantic properties of the predicates that scope the referential expressions play a
role in determining the interpretations of (in)definiteness and nondefiniteness. With nonfactive verbs (e.g., *aramak* “look for,” *istemek* “want”), the use of the non-case-marked objects such as in *balon istemek* “want [a] balloon” indicates nondefiniteness. That is, it is not the identifiability but the class membership of the referential term that is at issue in such an utterance. Thus, a definite interpretation becomes more likely when the NP is accompanied with factive verbs such as *görmek* “see,” as in *balon görmek* “see a balloon.”

In this study, I investigated what kinds of linguistic strategies Turkish speakers of different ages use in introducing new referents into extended discourse. Each participant was asked to provide a picture-based narrative. The data were then used to examine the linguistic devices used by speakers of different ages for introducing three different story participants into their discourse.

**METHOD**

**Participants**

Participants in the study were 70 preschool children, 30 elementary school children, and 15 adults—all middle-class residents of Istanbul, Turkey. All the participants spoke Turkish as their native language. For developmental comparisons, the participants were divided into five age groups. Table 2 indicates the number and gender of participants in each of the five age groups.

**Materials and Procedure**

A wordless picture story, dubbed the “Balloon Story,” was used to elicit narratives from the participants. This prompt was developed and originally used by Karmiloff-Smith (1981) to study extended discourse. The pictures depict the story of a little boy who, while walking on the street, encounters a balloonman and buys a balloon. Later, the balloon flies off and the boy starts crying while continuing to walk. As is evident from the description of the plot, the story has one major human referent.

**TABLE 2**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Age Rangea</th>
<th>M Age</th>
<th>Number</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>3- to 4-year-olds</td>
<td>3;2–4;11</td>
<td>4;4</td>
<td>35</td>
<td>16</td>
<td>19</td>
</tr>
<tr>
<td>5- to 6-year-olds</td>
<td>5;0–6;7</td>
<td>5;8</td>
<td>35</td>
<td>18</td>
<td>17</td>
</tr>
<tr>
<td>7-year-olds</td>
<td>7;0–7;10</td>
<td>7;5</td>
<td>15</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>9-year-olds</td>
<td>9;0–9;10</td>
<td>9;6</td>
<td>15</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Adults</td>
<td>22 and up</td>
<td>Adult</td>
<td>15</td>
<td>8</td>
<td>7</td>
</tr>
</tbody>
</table>

*aAges are expressed as years;months.*
protagonist (the boy) and a secondary character (the balloonman). The story consists of six frames that were presented as two three-picture strips, one placed above the other. Figure 1 shows the Balloon Story that was presented to the participants in this study. The three referents that were analyzed are indicated with arrows. Items in the pictures were colored using colored pencils. The balloon transferred from the balloonman to the boy was distinctively colored in red.

The child participants in the study were first asked to go through the pictures as quietly as possible so that they would be familiar with the entire plot. They were also told that they would be asked to tell “what is happening” in the story to someone else (either a teacher or a parent) afterwards. If any of the children seemed to disregard the order from left to right and top to bottom in viewing the pictures, the experimenter made some corrective suggestions. Once this preliminary phase was completed, the previously recruited listener was invited to enter the room and was seated on the opposite side of the table from the child, without being able to see the pictures. This naive listener procedure was used to motivate the child to provide clear referential expressions and to encourage verbalization rather than frequent deictic pointing and ellipted nominal phrases used commonly by young children in picture-book tasks in which the field of vision is shared by the experimenter. The experimenter also moved across the table to monitor the audio recording after attaching a small microphone onto the clothing of the narrator. The child was then instructed to start telling the story to the naive listener from the beginning. The listener was instructed in advance to try to keep quiet and not to provide any prompts. During all the procedures of storytelling, the listener and the experimenter remained mostly unobtrusive. The adult narrators were asked to construct a story on the basis of the pictures and tell it to the experimenter herself.

RESULTS AND DISCUSSION

The results of the analysis of the referential introduction devices are presented in three separate sections. In the first section, I address the main animate character (i.e., the boy); the second section is about the secondary animate character (i.e., the balloonman); and the third section involves a crucial inanimate entity, the red balloon, which is the object of transaction between the boy and the balloonman. Within each section, the lexical devices that act at the level of NP will be presented first. These devices are grouped into three basic categories depending on the type of the nominal form used: (a) **Indefinite NP** includes NPs prefaced by the indefinite numeral, (b) **bare NP** includes NPs not marked by an indefinite marker, and (c) **deictic form** contains demonstrative pronouns and ellipsis (i.e., clauses in which the person marking is indicated merely on the verb). Some infrequently used additional categories that were unique to each of the story participants were also tallied. These included **proper nouns** for the boy, nominals
FIGURE 1 Balloon story that was presented to the participants.
modified by adjectives (adjective NPs) for the balloon, and vocatives (e.g., quoted speech attributed to the boy calling to the balloonman). The last category, vocatives, are included in the counts even though they have a different status than the other referential devices; they refer only by being quoted in one of the characters’ speech. Each section also includes a discussion of the grammatical role and the word-order position filled by the introductory referential expressions used for each of the participants.

First Mention Devices for the Boy

The frequencies of linguistic forms by which the boy was introduced to the story are presented in Table 3 for each age group, categorized with respect to NP types. The numbers in parentheses reflect the percentage of use of each of the first-mention devices by each age group.

The distribution of the linguistic forms used for first mention of the boy in the adult group indicates no clear preference between marking or omitting to mark indefiniteness. The forms are almost equally divided between NPs marked for indefiniteness and bare NPs with no such marking. The deictic form was used by only one adult to present the boy into the narrative. This use is inappropriate, indicating the participant’s indifference to the task reflected both in her tone of voice and the immediate plunge into the mention of the purchase of the balloon. The pattern of distribution of forms indicate that, from 7 years of age on, nominals marked for indefiniteness and bare nominals are equally preferred. In other words, for older children and adults, explicitly indefinite nominals and bare nominals both seem to be acceptable as first mention forms, with the former being more formulaic rather than more informative.

Overall, developmental differences are evident between the preschool groups and the older groups. The use of the indefinite marker increases from 14% in the youngest age group to 26% in the 5- to 6-year-old group and varies between 40% and 50% for the older age groups. The distribution of the first-mention devices among in-

<p>| TABLE 3  |
| Distribution of First-Mention Devices Used for the Boy by Age |</p>
<table>
<thead>
<tr>
<th>Linguistic Forms</th>
<th>3–4</th>
<th>5–6</th>
<th>7</th>
<th>9</th>
<th>Adult</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indefinite NP</td>
<td>5 (14%)</td>
<td>9 (26%)</td>
<td>7 (47%)</td>
<td>7 (47%)</td>
<td>6 (40%)</td>
</tr>
<tr>
<td>Bare NP</td>
<td>25 (71%)</td>
<td>26 (74%)</td>
<td>8 (53%)</td>
<td>8 (53%)</td>
<td>8 (53%)</td>
</tr>
<tr>
<td>Deictic form</td>
<td>4 (11%)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>1 (7%)</td>
</tr>
<tr>
<td>Proper noun</td>
<td>1 (3%)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

*Note.* NP = noun phrase.
definite forms and bare forms was significantly different in the two preschool groups combined together versus the three older age groups considered together, $\chi^2(1, N = 109) = 6.99, p < .01$. Children at preschool ages do not seem to entertain the option of marking the explicit indefiniteness of the newly introduced boy as frequently as older groups. Also, the youngest age group used deictic references as first-mention devices for the boy almost as much as they employed indefinite forms.

In all the narratives collected from each of the age groups, the introductory NP for the boy occupied the subject role of the clause that framed it. With respect to word-order patterns employed in introducing the boy, the utterance initial position was used by all participants except for one 5-year-old. This participant inappropriately placed the nominal in the backgrounded postverbal position. Most often the constructions used for introducing the boy included other nonsubject constituents that followed the nominal for the boy. Thus, the focus position that immediately precedes the verb was commonly filled by elements other than the referential expression for the boy, as seen in the following example:

(10) **çocuk yol-da yürürken**  
*child road-LOC walk-GER*  
‘*(the) child, while walking,*’  

**bir baloncu-ya rastl-yor**  
*INDEF balloonman-DAT run.into-PROG*  
‘runs into a balloonman’  

This suggests that, regardless of prefacing the introductory referential forms by indefinite forms, speakers from all ages opt to assign topicality to the NP for the boy by placing the initial expression for it in the topical clause-initial position.

**First Mention Devices for the Balloonman**

The linguistic forms used for first mentions of the balloonman are presented in Table 4. Because the last two entries in Table 4 (no mention and vocative) did not appear among the first mention devices used for the boy, they were added to the categories in Table 3. No mention represents those cases in which there were no referential terms used for the balloonman throughout the story. Counts of no mentions were not factored in the calculation of the percentages in Table 4. The only additional form that is not among the types of devices used for the boy is the vocative, in which the balloonman is introduced within direct speech attributed to the boy, such as in the following example:

(11) “*baloncu bana bi balon ver-ir-mi-sin?*”  
*balloonman me-DAT INDEF balloon give-AOR-YN-2SG*  
‘*balloonman, would you give me a balloon?*’  

[4.z]
The occurrence of indefinite forms for the balloonman predominate from 7 years of age on. Similar to their presentational strategies for the boy, the two youngest groups do not often entertain the option of conveying indefiniteness explicitly in their introductions of the balloonman. The distribution of the first-mention devices for the balloonman among indefinite forms and bare forms was significantly different in the two preschool groups combined together versus the three older age groups considered together, $\chi^2(1, N = 93) = 17.39, p < .001$. However, in comparison to the devices used for introducing the boy, the three older age groups display a clearer preference for prefacing the nominal form for the balloonman by an indefinite form.

With respect to grammatical role, the balloonman was predominantly introduced to the narrative in nonsubject argument positions. Table 5 indicates the distribution of the grammatical roles occupied by the first mention referential expression used for the balloonman. This analysis was restricted to presentational utterances that included an explicit form for the balloonman. Across all ages, more than 79% of the introductory forms for the balloonman were placed in nonsubject roles.

As described in the overview section about the repertoire of linguistic strategies for expressing indefiniteness in Turkish, the definiteness status of a direct object is obligatorily marked with the accusative case ending in Turkish. The absence of the accusative case marking regularly signals a generic direct object, which has the discourse status of nondefinite. Thus, the introductory expressions used for argu-

### Table 4
Distribution of First-Mention Devices Used for the Balloonman by Age

<table>
<thead>
<tr>
<th>Linguistic Forms</th>
<th>3–4</th>
<th>5–6</th>
<th>7</th>
<th>9</th>
<th>Adult</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indefinite NP</td>
<td>5 (17%)</td>
<td>6 (19%)</td>
<td>9 (60%)</td>
<td>10 (71%)</td>
<td>8 (62%)</td>
</tr>
<tr>
<td>Bare NP</td>
<td>18 (60%)</td>
<td>22 (71%)</td>
<td>6 (40%)</td>
<td>4 (29%)</td>
<td>5 (38%)</td>
</tr>
<tr>
<td>Deictic reference</td>
<td>2 (6%)</td>
<td>2 (6%)</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Vocative</td>
<td>5 (17%)</td>
<td>1 (3%)</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>No mention</td>
<td>5</td>
<td>4</td>
<td>—</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

*Note.* NP = noun phrase.

### Table 5
Distribution of Grammatical Roles of First-Mention Devices Used for the Balloonman by Age

<table>
<thead>
<tr>
<th>Grammatical Role</th>
<th>3–4</th>
<th>5–6</th>
<th>7</th>
<th>9</th>
<th>Adult</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject</td>
<td>5 (22%)</td>
<td>3 (11%)</td>
<td>2 (13%)</td>
<td>3 (21%)</td>
<td>1 (8%)</td>
</tr>
<tr>
<td>Nonsubject</td>
<td>18 (78%)</td>
<td>25 (89%)</td>
<td>13 (87%)</td>
<td>11 (79%)</td>
<td>12 (92%)</td>
</tr>
</tbody>
</table>
ments fulfilling the role of direct objects such as the balloonman can implicitly acquire a “nondefinite interpretation” through the omission of the accusative case marking. That is, even if some speakers do not use the explicit indefinite numeral in introducing the balloonman, the nonsubject grammatical role allows for a nondefinite interpretation in the absence of the accusative case ending. An example from a 4-year-old is as follows:

(12) baloncu gör-dü karşı-st-nda
      balloonman see-PA across-POS-LOC
‘(he) saw a balloonman across from himself’ [4.y]

The picture portrayed for the two youngest groups in Table 4 is amended when we take into account such strategies of indicating nondefiniteness other than through the explicit encoding of indefiniteness through use of the numeral bi(r). The device of non-case-marked, nonsubject, first-mention nominals are rarely used by the older groups for the balloonman—never in the adult group, and only once in each of the 7-year-old and 9-year-old groups. However, as demonstrated by Example 12, preschoolers often use non-case-marked direct objects in their initial presentations of the balloonman. Table 6 represents the data from preschool age groups, and in contrast to Table 4, takes into account the signaling of nondefiniteness through non-case-marked objects in addition to explicitly indefinite forms. It presents a breakdown of the introductory forms used by the preschoolers for the balloonman with respect to the grammatical role of the referential expression and the interpretation it evokes regarding its definiteness status. The label nondefinite interpretation in Table 6 corresponds to the use of subject NPs with the indefinite numeral and nonsubject NPs with the indefinite numeral, or without case marking, or both.

For both of the age groups, many first-mention forms used for the balloonman, especially when encoded in nonsubject roles, lend themselves to a nondefinite interpretation, either through the indefinite numeral or the use of bare nominal in non-case-marked, nonsubject argument role. The indefinite numeral is used to precede the introductory referential form for the balloonman in less than 20% of the cases for both of the preschool age groups (see Table 4). When the absence of the

| TABLE 6 | Distribution of Definite and Nondefinite Interpretations of First Mentions of the Balloonman in Subject and Nonsubject Grammatical Roles, Across the Two Preschool Age Groups |
|---------|---------------------------------------------------------------------------------|------------------|------------------|------------------|------------------|
| Interpretation | 3- to 4-Year-Olds | 5- to 6-Year-Olds |
| | Subject | Nonsubject | Subject | Nonsubject |
| Definite | 5 (22%) | 8 (35%) | 2 (7%) | 13 (46%) |
| Nondefinite | — | 10 (43%) | 1 (4%) | 12 (43%) |
accusative case ending is taken into consideration, the extent of nondefinite interpretations by preschool children increases considerably, namely to 43% of the introductory forms. As omission of the accusative marker is rarely resorted to as the sole strategy of marking nondefiniteness by older speakers, it could be speculated that some preschoolers withhold the accusative case marking to avoid a totally definite interpretation, although they have not yet mastered the subtleties of marking information structure in Turkish. I return to this issue later in the section about the red balloon, in which the same strategy is observed in younger speakers’ discourse.

As for the word-order position of the referential term for the balloonman, the predominant slot was the focus position immediately preceding the verb. Table 7 shows a distribution of word-order positions used for introducing the balloonman across age groups.

Among the older speakers, only one speaker placed the initial nominal form referring to the balloonman in the postverbal position, prefacing it with the indefinite numeral bi(r). The specialized construction used by this speaker presumably brings forth an element of evaluative surprise, requiring the introduction of the referent to be suspended until the end of the clause. The single instance of this construction is provided in the following example:

(13) o strada bir de bak-iyor bir palabyuk-lt
    that moment EMP TOP look-PROG INDEF thick.moustache-PP
    bir baloncu-ya
    INDEF balloonman-DAT
    ‘then, he suddenly sees/notices a balloonman with a thick moustache.’

[Adult.h]

The data in Table 7 reveal that younger narrators also mostly opted for the position immediately preceding the verb to introduce the balloonman into the storyline. However, a few children at all ages exhibited exceptions to this pattern by positioning the balloonman either in the utterance-initial position or the postverbal position. Such preposing or postposing of the nominal form for the balloonman presupposes a

<table>
<thead>
<tr>
<th>Position</th>
<th>3–4 (22%)</th>
<th>5–6 (4%)</th>
<th>7 (7%)</th>
<th>9 (14%)</th>
<th>Adult</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utterance initial</td>
<td>1 (4%)</td>
<td>1 (7%)</td>
<td>2 (14%)</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Preverbal</td>
<td>15 (65%)</td>
<td>25 (89%)</td>
<td>14 (93%)</td>
<td>12 (86%)</td>
<td>12 (92%)</td>
</tr>
<tr>
<td>Postverbal</td>
<td>3 (13%)</td>
<td>2 (7%)</td>
<td>—</td>
<td>—</td>
<td>1 (8%)</td>
</tr>
</tbody>
</table>
prior mention of the balloonman in the preceding discourse, and thus is somewhat infelicitous as introductory referential forms. Following is an example of an utterance-initial use of the expression for the balloonman by a 4-year-old speaker:

(14) çocuk yürüyor
child walk-PROG
‘(the) child is walking’
baloncu-dan balon istiyor
balloonman-ABL balloon want-PROG
‘he asks for a balloon from the balloonman’ [04.i]

Despite occasional uses of positions that highly presuppose identifiability, all participants appear to prefer the focal position immediately preceding the verb to mention the balloonman for the first time in their narratives. It seems that, from younger ages on, Turkish speakers start to tune into some subtleties of word order in marking information structure in discourse.

First Mention Devices for the Red Balloon

The strategies used for introduction of the red balloon that flies out of the child’s hand, a crucial inanimate referent in the story, exhibit rather different characteristics than those observed in regard to the animate characters. Table 8 displays the findings. The categories of introductory noun types for the balloon were subdivided into indefinite NP, bare NP, and deictic form similarly to the human characters. A different category unique to this referent is adjective NP, which covers nominal phrases with color determiners such as kırmızı balon “red balloon.”

The most striking finding is that all of the age groups except for the two youngest groups predominantly avoid using bare nouns for presenting the balloon into their narratives. The distribution of the first-mention devices for the balloon among indefinite forms and bare forms was significantly different in the two pre-

<table>
<thead>
<tr>
<th>Linguistic Forms</th>
<th>3–4</th>
<th>5–6</th>
<th>7</th>
<th>9</th>
<th>Adult</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indefinite + NP</td>
<td>10  (32%)</td>
<td>15 (43%)</td>
<td>13 (87%)</td>
<td>13 (87%)</td>
<td>14 (93%)</td>
</tr>
<tr>
<td>Adjective + NP</td>
<td>1 (3%)</td>
<td>5 (14%)</td>
<td>1 (6%)</td>
<td>1 (6%)</td>
<td>—</td>
</tr>
<tr>
<td>Bare NP</td>
<td>16 (52%)</td>
<td>13 (37%)</td>
<td>1 (6%)</td>
<td>1 (6%)</td>
<td>—</td>
</tr>
<tr>
<td>Deictic form</td>
<td>4 (13%)</td>
<td>2 (6%)</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>No mention</td>
<td>4</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

Note. NP = noun phrase.
school groups collapsed together versus the three older age groups collapsed together, $\chi^2(1, N = 97) = 23.64, p < .001$. Bare NPs are used only once by each of the age groups past the age of 6 years. Also, similarly for the other referents, the deictic forms used for the balloon disappear past the age of 6 years.

In encoding the first mention of the balloon, the older group of preschool children, 5- to 6-year-olds, displays a slightly different distribution than the youngest age group, 3- to 4-year-olds. In addition, this group puts into use the combination of a color modifier plus a noun more than any other group, indicating capitalization on a strategy virtually absent in the narratives of the youngest children and older narrators. The use of a color term increases the identifiability of the balloon that is the object of transaction between the boy and the balloonman, and therefore indicates an effort to allow the listener to pick out the intended referent. More strikingly than the trend for developmental differences between the two preschool groups, a sharp increase in the use of indefinite forms can be observed from 7 years of age on.

In a similar vein to the balloonman, at all ages the balloon was predominantly introduced to the narrative by nominal phrases in nonsubject grammatical positions. With regard to word-order issues, all the referential terms for the initial mention of the balloon were placed in the position immediately preceding the verb, indicating its newness and focal role in the clause. As in the case of the balloonman, nondefinite direct objects with neither an indefinite numeral nor any case marking were occasionally used to introduce the balloon into the story. Adults and 9-year-olds do not resort to this strategy at all, and there is only one instance in the 7-year-old group. The preschool children, on the other hand, use non-case-marked objects in preverbal positions often to mark nondefiniteness. Following is an example from a 4-year-old in which the terms for the balloon and the balloonman are in a direct object grammatical role, both lacking the accusative case ending that is obligatory for encoding definiteness status on objects:

(15) baloncu gör-dü karş-t-st-nda
     balloonman see-PA across-POS-LOC
     ‘(he) saw a balloonman across himself’

balon iste-di
balloon want-PA
‘(he) wanted (a) balloon’ [4.T]

Table 9 summarizes the results for the nonsubject first mentions used for the balloon by the preschoolers. The label nondefinite interpretation is assigned both to the nominals prefaced by the indefinite numeral, or those lacking any explicit case endings, or both. The forms in nonsubject grammatical forms, and accordingly marked by case endings but not modified by the indefinite numeral, are coded to have a definite interpretation.
It appears many of the young children’s utterances introducing the balloon can be interpreted as assigning a nondefinite interpretation to the referent, as opposed to the impression one gets from Table 8 in which only explicit indefiniteness markers are considered. The referential terms prefaced by the indefinite numeral $bi(r)$ constitute only 32% of 3- to 4-year-old children’s introductory forms for the balloon, and 43% of that of the 5- to 6-year-old group. However, if one includes the strategy of omitting case endings for nominals in nonsubject roles as calling for a nondefinite interpretation, a different picture emerges. As seen in Table 9, 69% of 3- to 4-year-olds’ and 85% of 5- to 6-year-olds’ first-mention forms for the balloon allow a nondefinite interpretation. However, it should be mentioned that only one of the older speakers (one 7-year-old) opted to imply nondefiniteness of the balloon by using the strategy of using non-case-marked nouns that are not also prefaced by the indefinite numeral $bi(r)$. In fact, as seen in Table 8, most of the school age and adult story tellers explicitly marked the indefiniteness status of the balloon through the indefinite numeral $bi(r)$. It appears that, in their introductory forms, adults refrain from using such “object incorporation” type of constructions in which the nondefiniteness interpretation can be only indirectly attained. Although such constructions imply nondefiniteness, they are not totally felicitous for identifying and introducing the distinct balloon that is transacted. For example, the verbal phrase *balon istemek* “to ask for/want a balloon,” in which the term used for the red balloon is used as a non-case-marked object, implies a nonspecific reference to balloons in general. In fact, some older narrators express the difference between balloon as a generic category and balloon as a specific object by juxtaposing two utterances including the word *balon* “balloon.” An example from an adult follows:

(16) *Ali balon almaya gidiyor*  
Ali balloon get-NOM-DAT go-PROG  
‘Ali goes to get (a) balloon’

*bir tane kırmızı balon seç-iyor*  
INDEF red balloon choose-PROG  
‘(he) picks a red balloon’  
[Adult.i]
The object incorporation type of forms observed in younger speakers’ narratives (see Example 15) do not serve this mature function of embodying specific references to the balloon within a backgrounding generic utterance. On the contrary, these generic forms without an indefinite numeral or case marking in young children’s narratives constitute a somewhat immature device.

**DISCUSSION AND CONCLUSIONS**

The purpose of this study was to investigate the developmental differences in Turkish speakers’ discourse competence in initially encoding the identity of referents for their listener in extended discourse about a picture series. The analyses focused on the linguistic form and the sentential position of first-mention devices. Based on the findings presented earlier, I can conclude that, across the three types of referents analyzed, the preschool age children used the optional explicit indefiniteness marker *bi(r)* much less frequently than the older speakers. For all age groups, however, the story participants differed from one another with respect to the extent of being framed in indefiniteness marking. The inanimate character (the balloon) was initially encoded by linguistically indefinite forms more than the human-like characters (the boy and the balloonman). Also, in first mentions of the balloonman and the balloon, the referential term was commonly placed in a nonsubject grammatical role by speakers of all ages, occasionally yielding some nondefinite interpretations arising from non-case-marked objects. When such implicit devices for marking nondefiniteness were taken into account, it was observed that preschool children more often used introductory referential terms that call for a nondefinite interpretation. The low incidence of such indirect ways of indicating nondefiniteness in older speakers’ narratives suggests that the older narrators robustly mark information structure, whereas the interpretations of nondefiniteness in young children’s narratives, if at all possible, have to rely on the argument structure and the semantic properties of the verb accompanying the introductory form. Thus, older narrators are more sensitive to facilitating the listener’s referent identification task.

Overall, differential degrees of nondefinite interpretations are evoked by the introduction of the three story participants into the discourse across all ages: the inanimate character (the balloon) receives the indefinite framing most frequently among the three characters, followed by the secondary human character (the balloonman), and then finally by the main human character (the boy). This finding concurs with some past studies’ observations in respect to the effect of the features of the character on first-mention forms. Other researchers have noted for English (Hickmann, 1982; Hickmann, Liang, & Crevel, 1989; McGann & Schwartz, 1988; Wigglesworth, 1990), for German (Bamberg, 1986, 1987), for French (Kail & Hickmann, 1992), and for Japanese (Clancy, 1992) that narrators use fewer indefinite and more presupposing forms for main characters than for secondary charac-
ters. At all ages considered by these different studies, the main character was rendered in more initial definite encodings than the secondary character.

Hickmann (1980, 1982) also found that English-speaking children’s first-mention strategies differ with respect to the animacy feature of the presented character. Human-like characters were the least likely ones to receive indefiniteness marking, whereas inanimate referents were most likely expressed with a noun preceded by an indefinite article. The Turkish patterns, hence, corroborate a cross-linguistically consistent tendency for the frequency of indefinite marking to alter in relation to the centrality and animacy status of the story participants. Clancy (1992) pointed out that the main character is naturally the most prominent or strongly activated referent in the speaker’s consciousness. It seems that the degree of perceived prominence of the character in the speaker’s mind has an influence on the indefiniteness of the linguistic form chosen to acquaint the listener with that character.

The results are in line as well with the general developmental trend established by researchers in other languages, indicating a gradual emergence of the development of the expression of indefiniteness status of newly introduced referents. Studies with speakers of languages with a formal article system have demonstrated that the functions of articles in reference introduction and tracking are not established before 6 or 7 years of age (e.g., Bamberg, 1986, for German; Hickmann, 1980, 1982, for English; Kail & Hickmann, 1992, for French; Karmiloff-Smith, 1979, 1981, for French and English; Wigglesworth, 1990, for Australian English). Similar investigations of languages without a formal article system have also yielded comparable developmental profiles in which the control of the relevant expressive options for expressing indefiniteness evolve over a span of several years, not approaching near maturity before 7 to 10 years of age (e.g., Bavin, 1987, for Warlpiri; Clancy, 1992, for Japanese; Dasinger, 1995, for Finnish; Hickmann, 1995, Hickmann et al., 1996, for Mandarin Chinese; Nakamura, 1993, for Japanese). In the current Turkish data, the differences observed between preschooler participants and older narrators confirm such developmental patterns. A disappearance of the inappropriate deictic forms is observed by 7 years of age. A gradual movement away from the use of bare NPs toward explicit indefinite marking with increasing age is also demonstrated. The results for all three story characters demonstrate that preschool children were not inclined to employ the indefinite numeral in their presentational forms. In introductions in nonsubject grammatical roles, preschoolers often implied nondefiniteness by placing non-case-marked objects in preverbal sentential positions. This implicit device of indicating indefiniteness was not favored by older children and adults, attesting to its developmentally transitional role in reference introduction.

Two factors could be speculated about when Turkish preschool children hold back from employing explicit markers of indefiniteness, possibly interacting with one another. The first one is the language-specific lack of systematicity in associating newness of discourse referents with the numeral bi(r), an optional indefiniteness marker. The other factor is peculiar to the picture-based elicitation method.
that invokes a here-and-now ambience that might foster a presumption of given identity about the referent on the part of the speaker. With respect to encoding indefiniteness, pictures seem to lead speakers to presuppose more shared information with their listeners than in a story constructed without visual props. The issue of referent identifiability (especially for the story protagonist) does not authentically arise in a picture-narrating, communicative situation because it is mutually assumed by both the narrator and the listener that the former is talking about the pictures unless otherwise specified. Because it is mutually known that at least the speaker’s attentional focus is directed to the pictures, he or she might not consider the full range of paradigmatic options in choosing between forms of referring expressions marking different levels of identifiability. Especially in languages such as Turkish in which article-like systems are diffuse and not obligatory, a bare noun occurring for the first time in a given discourse might easily fulfill the function of an indefinite article, that is, allowing the addressee to identify or access a representation of the type of object described by the nominal expression. An abrupt plunge into the description of pictured events would not come across as pragmatically inappropriate as when telling personal stories about past events and absent characters. In a nutshell, in languages in which the system for marking of definiteness does not consist of a transparent connection between articles and discourse status of nouns, speakers might more often rely on the situational context, or the listener’s inferential system, or both to fill in the information.

Clearly, these factors should be considered within a framework that also pays attention to developmental factors. As Shatz (1983) argued

The appropriate referential performance requires in all but the simplest cases coordination among a variety of subskills: the ability to access the listener’s knowledge state, knowledge of the referential conventions of the language, inferential ability, and memory for discourse. There is no evidence that any of these subskills is completely out of preschoolers’ range of competence, although clearly the content and richness of any of these areas grows with experience. It does appear that children’s deficient performance on complex referential tasks is well explained by the difficulty they have in maximally utilizing their partial and still-fragile subskills in requiring their confluence. (p. 864)

In this study, some of these “partial and still-fragile skills” were observed to occur in marking the discourse status of nonprotagonist characters. Where devices other than explicit indefiniteness nominal markers were taken into account, it was observed that preschool children were able to use strategies that call for a non-definite interpretation. It is plausible that an investigation of the expression of indefiniteness in more naturalistic and dialogic discourse situations would reveal more about how young children maximally utilize their fragile subskills serving referential performance. Cameron and Wang (1999), for example, found that even
4-year-olds produce more adequate referential devices on the phone, in which establishing common ground could only be achieved by pure talk, as opposed to face to face. An evident direction for future research is studying referential management strategies in different discourse situations than monologic, picture-based narratives.

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REFERENCES


**APPENDIX A**

The abbreviations used in the morphological glosses are

- ABL = ablative
- ACC = accusative
- AOR = aorist
- CAUS = causative
- DAT = dative
- EMP = emphatic particle
- EVID = evidential
- GER = gerund
- GEN = genitive
- INDEF = indefiniteness marker
- INST = instrumental
- LOC = locative
- NOM = nominalizer
- PA = past
- POS = possessive
- PP = postposition
- PROG = progressive
- TOP = topical particle
- YN = yes–no question particle
- 2SG = second person singular
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