The Role of Idiomorphs in Emergent Literacy

Michelle M. Neumann and David L. Neumann

School of Psychology, Griffith University, QLD 4222, Australia

Psycholinguistics coined the term *idiomorph* to describe idiosyncratic invented word-like units that toddlers use to refer to familiar objects during their early language development (Haslett & Samter, 1997; Otto, 2008; Reich, 1986; Scovel, 2004; Werner & Kaplan, 1963). Scovel (2004), for example, observed a child say “ka ka” to refer to milk. Idiomorphs act as “words” because their meanings and phonetic pronunciations are stable and consistent (Haslett & Samter, 1997). Parents and family members often adopt idiomorphs, which can be intermingled with other words, to encourage their toddlers to communicate with them (Otto, 2008; Reich, 1986). As their language skills develop, children gradually replace the idiomorph with the correct verbal label for the object (Scovel, 2004).

Young children have been reported to use idiomorphs in reference to objects, but little has been written on how children use idiomorphs to refer to print. Recent research indicates that idiomorphs can play a role in early literacy development. This article summarizes research and provides practical examples using the observations of a young child. Specific examples are given to show how parents and early childhood educators can use idiomorphs to develop a child’s emergent literacy.

The Benefit of Idiomorphs for Developing Emergent Literacy

Emergent literacy refers to the gradual development of skills, knowledge, and attitudes that precede conventional reading and writing (Welsch, Sullivan, & Justice, 2003; Whitehurst & Lonigan, 1998). These skills begin to develop from birth and continue in the years prior to school and are related to future reading ability (Snow, Burns, & Griffin, 1998; Whitehurst & Lonigan, 1998). Emergent literacy skills include print awareness (an understanding of the forms and functions of print); alphabet
knowledge (knowledge about letter shapes, names, and sounds); and phonological awareness (ability to manipulate the sounds in language) — with print motivation (a child’s interest in print) influencing a child’s participation in print-related activities (Whitehurst & Lonigan, 1998). Young children’s early encounters with print are likely real-life interactions with their families and in their sociocultural environments (McGee & Purcell-Gates, 1997; McNaughton, 1995). These encounters include storybook reading, letter-based activities (e.g., drawing and coloring letter shapes, alphabet games), singing rhymes, and interactions with environmental print (Kuby, Goodstadt-Killoran, Aldridge, & Kirkland, 1999; Nutbrown, Hannon, & Morgan, 2005; Vukelich, Christie, & Enz, 2008; Wood, 2002).

However, Otto (2008) describes how young children may have difficulty responding to questions relating to the recognition or identification of such metalinguistic print-speech concepts as “word” or “letter.” For example, she describes how 3-year-old Robbie was asked, “What is a word?” and he replied, “I’ll tell you numbers, nine” (p. 51). When then asked, “What is a favorite word of yours?,” he responded by saying, “I don’t like questions” (p. 51). This type of metalinguistic knowledge is not usually evident until children reach the age of at least 4 or 5 and is also dependent upon their early language experiences (Rowe & Harste, 1986). Nagy and Anderson (1995) outlined how learning to read is fundamentally metalinguistic; a child must realize that print represents speech, work out how print represents speech, develop an understanding about what linguistic elements of speech are represented by elements of written language (e.g., whether marks represent phonemes or something else), and make sense of such metalinguistic terms as “word” and “letter.”

Interestingly, a few recent studies have shown how some 2-year-old children use their own invented words to refer to print, enabling them to confidently communicate with adults about the print they have discovered (McGee & Richgels, 1989; Neumann, Hood, & Neumann, 2009; Sinclair & Golan, 2002). It is possible that early print interactions may be facilitated through children’s temporary use of such invented idiomorphs, which, in turn, can enhance a child’s learning of metalinguistic knowledge, noted by Nagy and Anderson (1995) as underlying the process of learning to read.
To date, the use of idiomorphs to refer to elements of print during the emergent literacy period was evident in a small number of observational studies (McGee & Richgels, 1989; Neumann et al., 2009; Sinclair & Golan, 2002). These studies describe the interactions between a parent and child. In a case study of “Luc” at age 2;4, it was reported that he used his own invented words to name 3 letters: “hammer” for T, “ladder” for H, and “teen” for N (Sinclair & Golan, 2002). Luc was observed to use them persistently for some time and was aware that they were his special labels, as he said, “I call ‘teen,’ Mama call ‘en’” (p. 559). At 2;10, when asked to read a label printed on a bottle, he said “apoo,” which was his idiomorph for baby bottles. McGee and Richgels (1989) also described observational studies of toddlers’ early interactions with print. For example, at 20 months, “Giti” called the M-shaped arches in a McDonald’s logo “On aw.” By 2 years, she called the M in K-Mart “McDonalds” and called her M-shaped writing “Marce” (her mother’s name). These observations show that she was using her own idiosyncratic words to refer to the print she had discovered.

The use of an idiomorph to refer to print was described in more detail in a case study by Neumann et al. (2009). Two-year-old “Harry” used his own term—“up downs”—to refer to surrounding print he was interested in. He used this term to refer to print when he did not know what the print “said,” but knew it was print and not pictures and that it meant something. For example, when his mother was reading a storybook, Harry said “up downs” as he pointed to the print. His mother immediately read the word that Harry was referring to. The idiomorph acted as a scaffolding tool that Harry’s mother adopted and used herself to communicate with him about the print he had discovered. Scaffolding refers to providing a temporary tool to support learning; when a task has been mastered, the tool is longer needed (Wood, Bruner, & Ross, 1976). Consistent with this theory, Harry and his mother stopped using the “up downs” idiomorph when he eventually learned to say the conventional verbal labels of print. As Harry’s print knowledge gradually increased over the following years, his use of the idiomorph decreased; by the age of 4, he no longer used the idiomorph to refer to print.

In an educational setting, Dyson (1984) reported that 5-year-old “Dexter” used the word “dummy” or the name “Lester” (the name of a ventriloquist’s dummy he knew) to refer to the letter D. He also used other idiomorphs to refer to other letters in his environment: “grandmama” for N,
“Santa” for S, “pizza” for p, and “glasses” for g. Dyson (1984) suggested that helping Dexter talk about letters in this way fostered his print awareness and interest in print.

The observational case studies conducted to date (Dyson, 1984; McGee & Richgels, 1989; Neumann et al., 2009; Sinclair & Golan, 2002) show that young children can invent and use idiomorphs to talk about print with others. However, case studies do not indicate the general rate of using idiomorphs among the general population. Further research is required to estimate its prevalence. Nevertheless, the detailed study of individual children has the potential to significantly advance our knowledge of how young children might engage with print by using idiomorphs. The study of such examples also can offer practical suggestions about how other adults might use idiomorphs to encourage young children’s emergent literacy development.

Examples of the Use of an Idiomorph by a Child

Our prior study (Neumann et al., 2009) reported on the use of the “up downs” idiomorph by Harry. We have since observed that Harry’s younger sibling “James” adopted the idiomorph at age 2 years to communicate about print in his environment. For example, when James wanted to let his parents know he had discovered print, he said “up downs.” James referred to many different types of print as “up downs.” Examples include print on T-shirts, storybook titles, table placements, commercial labels on shoes, print on crockery, the computer keyboard, cereal boxes, buttons on the microwave oven, and refrigerator magnets. Examples of interactions between James and his mother when James was between 2;6 to 2;9 years of age are given in Table 1.

---

The examples shown in Table 1 suggest that James’ use of the idiomorph fostered his interest in print. The idiomorph allowed James to initiate conversations with his mother about the print he had discovered, thereby increasing parent-child communication and his knowledge about the elements and functions of print. The idiomorph signified that James was referring to print, and not to an object or picture. The mother was able to respond to James’ interest by reading the word or naming the
letter that her son had discovered or simply congratulating him for finding print. This interaction seemed to have a positive effect on James’ literacy development. For instance, the last example shown in Table 1 occurred multiple times during his walks with his mother. In one instance, James pointed specifically to the D in the sign and said, on his own, “D dog,” instead of using the idiomorph “up downs.”

An interesting side point in the observations of James was that the “up downs” idiomorph was the same as that used by his older sibling Harry (see Neumann et al., 2009). Prior studies have only described idiomorphs that were invented by the child (McGee & Richgels, 1989; Neumann et al., 2009; Sinclair & Golan, 2002). However, other family members may adopt a child’s invented idiomorphs (Otto, 2008; Reich, 1986). In the case of James, his mother and other family members naturally adopted the invented idiomorph during literacy interactions with him and this would have encouraged him to use it himself when initiating literacy interactions with others. Another relevant point is that James used a single idiomorph to refer to all aspects of print. This behavior contrasts to that from the case study of Luc, described by Sinclair and Golan (2002), in which different idiomorphs were used to refer to different letters.

Advantages of Idiomorphs Over Conventional Labels for Print

From a traditional perspective, early childhood educators may argue that encouraging young children to use invented idiomorphs to refer to print will only confuse them, preferring that print be introduced using conventional labels from the beginning. However, there are some significant advantages to using personal idiomorphs (e.g., Luc’s idiomorph “hammer” for the letter T [Sinclair & Golan, 2002] or Harry’s “up downs” to refer to words) over that of conventional print labels (e.g., “letter,” “word”). Perhaps one of the biggest advantages to using idiomorphs is that they are personally meaningful for the child. The idiomorph may have its origin in the child himself (Neumann et al., 2009), and it has immediate meaning within the child’s own sociocultural environment. In contrast, conventional labels are often difficult for many young children to articulate or conceptualize (Adams, 1990; Chou Hare, 1984; Clay, 1991; Otto, 2008).

The conventional labels of print are also numerous (e.g., letters, words, numbers, 26 individual
letter names, signs, labels, messages, text, alphabet, lowercase, uppercase, capitals, punctuation marks, and symbols from other languages). It can take a child several years to learn the correct labels. Young children often confuse the terms “letters” and “words” even after a few years of formal literacy learning (e.g., Adams, 1990; Chou Hare, 1984; Justice & Ezell, 2001). Interestingly, Adams (1990) discusses the nature of word learning and gives examples of how young children begin labeling objects by using a general term, and later learn to refine and consolidate their knowledge of features that set each object apart. For example, Adams explains how children may have used the label “chicken” to describe any form of meat they encounter, but later they learn that it is better to call some meat “beef,” “pork,” or “turkey.” Or all dogs might once have been “doggies” until the child later learns to categorize them as “poodle,” “dalmatian,” “beagle,” and so on, based on their visually distinct features. Children’s invention of idiomorphs to refer to print thus may indicate their early attempts to categorize print in order to make sense of it.

Furthermore, idiomorphs also may provide many rich opportunities for young children to initiate interactions with print and encourage dialogue between the parent and child about print they encounter in the environment. Children’s use of idiomorphs may provide a personal way for them to communicate about surrounding print. This avenue for communicating about print may in turn help to foster their print motivation, metalinguistic awareness, alphabet knowledge, and other emergent literacy skills as indicated by research conducted to date (Neumann et al., 2009; Sinclair & Golan, 2002).

Ways Parents and Early Childhood Educators Can Use Idiomorphs To Promote Emergent Literacy

To benefit from children’s use of idiomorphs, practical strategies are needed that parents and early childhood educators can use to identify when a child uses an idiomorph and how to engage the child with print by using their personal idiomorph(s). In this respect, it is worthwhile to keep in mind that a child’s idiomorph use may be dependent upon a few precursory skills. These include visual skills in which the child is developing her ability to distinguish between print and non-print and verbal skills in which the child is able to utter vocalizations in a meaningful and consistent way. It is important to carefully observe and listen to the toddler’s interactions with print during such activities as storybook
reading, drawing, and pointing out surrounding print. The child’s idiomorphs can be identified, because the meanings and phonetic pronunciations will be stable and consistent. The adult should remember the idiomorphs and whether different idiomorphs are used for different aspects of print (e.g., letters versus words), so that they can be used in future print interactions.

Idiomorphs provide a stimulus to initiate literacy interactions, encourage dialogue between the child and adult, and contribute to the development of emergent literacy skills in the child. When the child points out print, ask yourself: What are they pointing to? What do they verbally refer to it as? Let the child lead the discussion, follow their lead, and extend their idiomorph use and communication about print. The following scenario provides an example of these principles. During grocery shop play, a toddler points to an M on a milk bottle and says “bunny.” The parent responds enthusiastically, saying, “Yes, that looks like bunny rabbit ears—it’s an M for ‘milk.’” The parent can encourage the child to trace the letter M with a finger, saying, “Look at the humps go up and down.” The parent might also point to other print and ask, “Can you find more bunny ears?” This prompt will encourage the child to explore his environment further to search for print. On a following day, the parent may reinforce the child’s emerging print concepts by using the “bunny” idiomorph to encourage the child to point out more print in the environment. If the child applies the idiomorph to other types of print, the parent can follow their lead (e.g., Parent: “Great work! That bunny is the letter W; its humps go down, up, down, up, and this bunny is the letter N; its humps go up, down, up,” while tracing it with a finger). As this scenario shows, the idiomorphs that children use are idiosyncratic and personally meaningful to them. Parents, caregivers, and early childhood educators need to be imaginative, sensitive, and receptive to these cues to encourage a child’s early communication about print.

Tables 2 and 3 show a variety of activities that may encourage a toddler’s use of idiomorphs to describe print in all its different shapes, sizes, colors, fonts, and functions, and offer suggestions on incorporating the child’s idiomorph into each activity. It is important to seek out what is personally meaningful to children, such as their names or labels on their favorite toys. Also, refer to individual letters in their name or other print source, using the idiomorphs the children have previously used to describe them. Then follow up by providing the conventional letter name/word (e.g., “Yes, good job! 
Those bunny ears are also called the letter M.”). As children develop, a transition period occurs in which they learn the proper print term (e.g., the letter M) and the scaffolding idiomorph will no longer be needed. This transition may be fostered by the parent/early childhood educator using the idiomorph to help scaffold literacy learning (see Neumann et al., 2009) and by children’s own language development and literacy experiences.

---

Insert Table 2 and 3 about here

---

Conclusion

The descriptions of young children’s use of invented idiomorphs to refer to print (Dyson, 1984; McGee & Richgels, 1989; Neumann et al., 2009; Sinclair & Golan, 2002) provide some evidence that this behavior can help foster children’s interest in and knowledge of print early in their development. Idiomorphs provide many rich opportunities for young children to initiate interactions with print and communicate with their parents and other adults about it. This, in turn, can help foster metalinguistic skills and emergent literacy skills. Parents and early childhood educators can use idiomorphs to encourage dialogue about print concepts and promote the learning of more conventional labels for print. There is a need to develop strategies for using idiomorphs to foster a child’s literacy in not just the home, but also in an education context.

References


Idiomorphs in emergent literacy


Idiomorphs in emergent literacy


---

Table 1. Examples of the Use of the “Up Downs” Idiomorph by James Between 2;6 and 2;9 years.

<table>
<thead>
<tr>
<th>James’ Idiomorph Use</th>
<th>Mother’s Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>James spontaneously yelled out “up downs” as he pointed to very large print on the side of a bulldozer digging in his front yard.</td>
<td>His mother said, “Yes! that says ‘HYUNDAI.’ Can you say Hyundai?”</td>
</tr>
<tr>
<td>When playing with his toy train set, James exclaimed “up downs” as he pointed to the label printed on the side of a train.</td>
<td>The mother said, “Great work. Your train says ‘EAST VALLEY.’ Can you see the E for egg?”</td>
</tr>
<tr>
<td>When “ABC kids” print appeared on the TV screen, James shouted out, “up downs.”</td>
<td>His mother pointed to the print and said, “Yes, and look—there’s an A for apple.”</td>
</tr>
<tr>
<td>During a walk down the street, James looked up at a power pole and said, “up downs.”</td>
<td>His mother immediately stopped walking and said, “Yes, you are right; there are letters and numbers on the power pole; they are S P 42 10 897. Can you see the S?”</td>
</tr>
</tbody>
</table>
On walks in the neighborhood with his mother, James pointed out and said “up downs” as he referred to print on mailboxes and other objects. James often insisted that they walk to mailboxes, road signs (e.g., ROAD ENDS), and signs on gates (e.g., BEWARE OF THE DOG) to trace the print with his fingers. His mother sometimes pointed out specific letters in the signs (e.g., “D for Dog”).
Table 2. Daily Activities in Which the Child’s Idiomorph Can Be Used To Encourage the Child To Use, Describe, and Communicate About Print

<table>
<thead>
<tr>
<th>Daily Activity</th>
<th>Print Resources</th>
<th>Using Idiomorphs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mealtime</td>
<td>Food product labels, table placemats, refrigerator magnets</td>
<td>Ask child to find and point out print on product packaging using child’s idiomorph. <em>Example: At breakfast, the child pulls a cereal box from the pantry.</em></td>
</tr>
<tr>
<td>Playtime</td>
<td>Toy labels, clothing and shoe building blocks</td>
<td>Ask child to find print on their toys using child’s idiomorph. Use idiomorph to encourage child to form letters using blocks and other objects. <em>Example: Playing with LEGO blocks.</em></td>
</tr>
<tr>
<td>Shopping</td>
<td>Shop signs, food product labels, credit cards, price labels, money</td>
<td>Ask child to look for and point out print on grocery packaging using child’s idiomorph. <em>Example: Grocery shopping (or in a grocery shop play setting).</em></td>
</tr>
<tr>
<td>Traveling</td>
<td>Road signs, street signs, mailbox numbers, billboards,</td>
<td>Ask child to search for print on signs, number plates, and billboards using child’s idiomorph. <em>Example: Traveling in the car.</em></td>
</tr>
</tbody>
</table>
Idiomorphs in emergent literacy

Car number plates, train/bus timetables

P: Let’s look for some “idiomorph.”

C: Yells out “idiomorph!”

P: Fantastic! That sign says STOP; it means we have to wait. Can you see the P in the sign—just like in your name, Patricia?

Cooking Recipes, food product labels, measuring/mixing bowls, utensils, labels on appliances

Ask child to point out print on food packaging and in recipes using the idiomorph. Use idiomorph to encourage child to form letters using food (e.g., noodles) or by drawing (e.g., icing on cakes).

Example: Baking some cookies.

P: Let’s read the recipe to find out what we need.

C: “Idiomorph”! (points to the word “cookie” in the recipe book).

P: Yes, that says “cookie”; can you see the two O’s in cookie—they go round and round (traces the O’s with a finger).

C: They are two eyes!

Note.
The child’s invented word should be used in place of “idiomorph” in the above examples. Some examples may need to be adapted according to whether the child’s idiomorph refers to a letter, word, or print in general. C = child and P = parent/carer/early childhood educator.
Table 3.

Table: Literacy Activities in Which the Child’s Idiomorph Can Be Used To Encourage the Child To Use, Describe, and Communicate About Print

<table>
<thead>
<tr>
<th>Literacy Activity</th>
<th>Print Resources</th>
<th>Using Idiomorphs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint reading</td>
<td>Storybooks/titles with large bold print, alphabet books, posters, magazines, comic books</td>
<td>Ask child to find and point to print on the page, using the child’s idiomorph. <em>Example: Storybook reading.</em></td>
</tr>
<tr>
<td></td>
<td>P: Can you find “idiomorph” on this page? (Child points to the print, not to the picture.) P: Good job! That says, “Please come to my party today.” Can you find any more “idiomorph”? C: Child points to the S and says his name: “Sam.” P: Yes! That’s the letter S for Sam in your name. Let’s find another snakey S. Can you say SSSSS?</td>
<td></td>
</tr>
<tr>
<td>Joint writing</td>
<td>Pens, paint/brushes, crayons, scrapbook, paper, magnetic sketchboard, chalk, blackboard, and letter-making materials like play dough, twigs and leaves, food (e.g., noodles, fish fingers), and building blocks</td>
<td>Ask child to draw, copy or make print-, letter- or word-like forms using the child’s idiomorph. <em>Example: Making alphabet letters using play dough.</em> P: Let’s make some “idiomorph,” like this H (points to H on alphabet poster). C: I make that “idiomorph.” P: OK, “idiomorph” has straight sticks in it. Help me roll the play dough. P: Let’s put them together (helps child to form letter H with the 3 sticks of play dough). C: Look! I made “idiomorph.” P: Great work. You made the letter H for “house” and, yes, it looks like a house! (They trace the letter with their finger, using directional language: “H goes down, down and across.”)</td>
</tr>
</tbody>
</table>
Environmental print-rich play: Food packaging, signs, product labels, print on clothes, stamps, play money, used envelopes

Ask child to find and point out print within environmental print-rich play settings, using the child’s idiomorph.

*Example: Playing in a clothes shop play setting.*

P: Can you see any “idiomorph”?

C: Shouts “idiomorph” and points to printed words on a T-shirt hanging on clothes rack.

P: Well done! That says “Happy Bear” (runs a finger under the words). Can you find “idiomorph”?

C: Yes! (child points to the B).

P: Great, that’s the letter B for “bear” (traces the B with a finger).

*Note.*

The child’s invented word should be used in place of “idiomorph” in the above examples. Some examples may need to be adapted according to whether the child’s idiomorph refers to a letter, word, or print in general. C = child and P = parent/carer/early childhood educator.