

than each individual ingredient. We asked the children to close their eyes and put all of their ideas into a “mixing bowl” and stir them up to see what came out. The children and adults then began talking about possible ways to mix ideas. Once the group had an initial consensus, they created a name for the center and drew their ideas on a piece of table-sized paper. The results of these four groups were: Magic Funhouse, Magic Holiday Game, Storytelling Legos, and Zoo Center (as illustrated in Figure 1).

At this point, it was our intention to jump directly to mixing the ideas of all four centers. However, in looking at how different the ideas were from each group and that the children still needed a great deal of structure in order to collaborate, we decided to add another step. Therefore, the four groups were grouped into two groups and The Magic Holiday Game and the Zoo Center combined to make Animal Holiday Games and the Storytelling Legos plus the Magic Funhouse combined to make Storytelling Funhouse.

Stage Three: Mixing the big idea. After these intermediate steps, it was time to mix the big idea. Before we had the 11 children meet together, the adults discussed possible ways in which the two ideas could become one, which offered us possible roadmaps in preparation, for our final mixing session. In preparation, we cut up the ideas from the previous stage into little pictures. During this last mixing session, the children rearranged the cutouts and put them together with tape as a way to begin thinking of how their ideas could fit together (see Figure 2). Then we used a large piece of paper and drew the big, final idea called the Story Game Fun House (see Figure 3)—an outdoor structure with many connected rooms.

Many of the more specific ideas from earlier stages in mixing ideas may appear to be lost in the final big idea. Although an individual idea may not be immediately apparent in the final concept, the mixing and elaboration process sparks imagination and innovation and

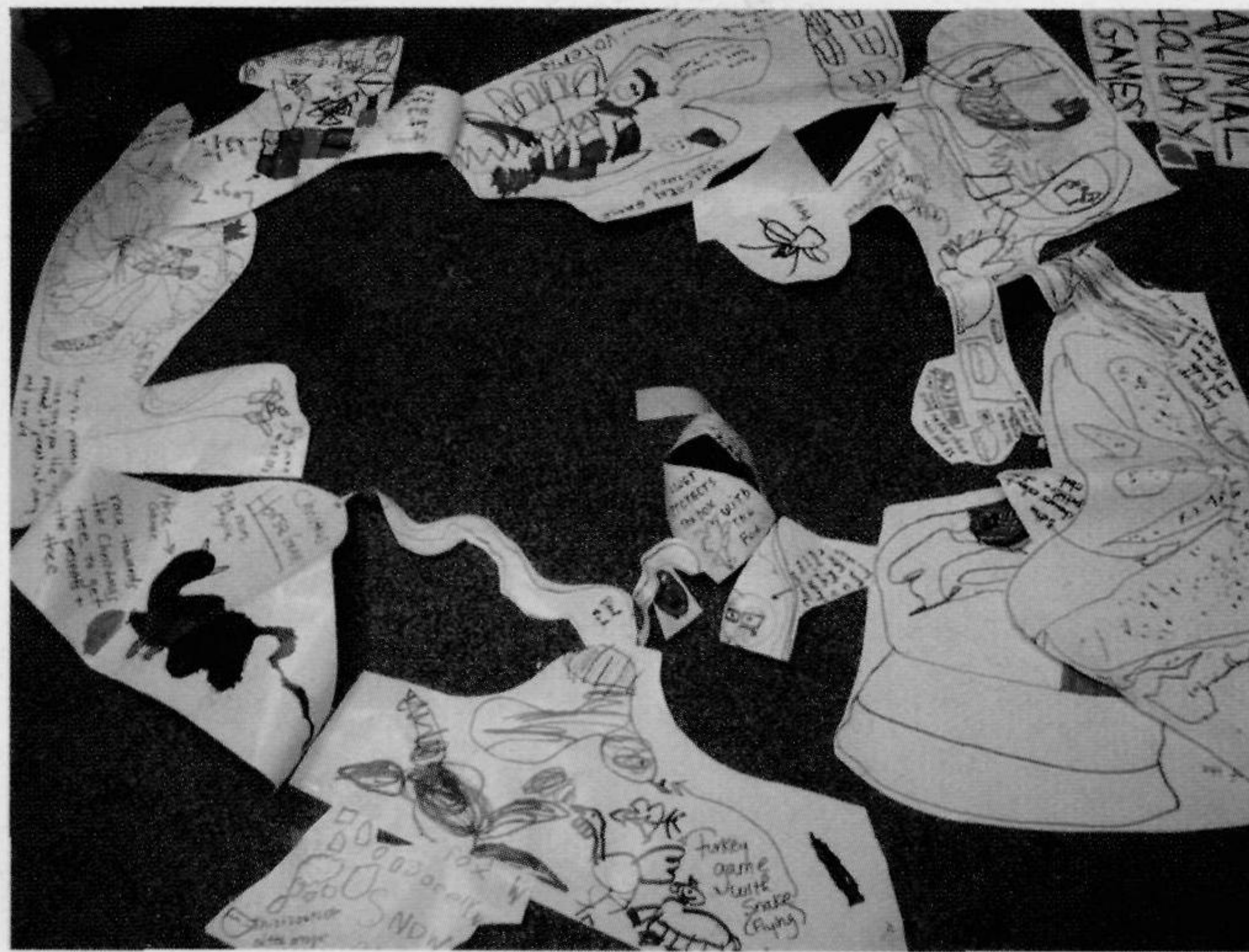


Figure 2. The cut up and remixed big idea.

collaborative play, connecting ideas, and collaborative construction of new ideas. Additionally, the children were interested in outdoor environments. By combin-

ing these observations, we are exploring ideas involving collaborative environments that can support connectedness between young children in outdoor settings. We are currently developing technology to enable children to play and learn in outdoor environments while sharing information with one another.

What Children Thought of Mixing Ideas

We concluded the mixing ideas process by asking the children what they liked the best and what they felt was the “hardest” part of being a design partner. The children drew their thoughts in their journals and had an adult annotate their drawings. The most frequent answers included:

Likes: Drawing, mixing ideas, and observing.

The aspect that emerged most frequently was the children liked drawing. Since most children at this age are not yet able to fully express their ideas clearly in writing, drawing gives them a way to do so. Allowing an adult to annotate their drawings enables more complete expression of their ideas. Another aspect the children liked was simply mixing ideas. One child mentioned combining ideas as his favorite part, while another mentioned his work on a center that grew out of mixing ideas as his favorite. Two children also mentioned they liked observing their classmates in classroom centers.

Hardest: Individual idea generation, physically

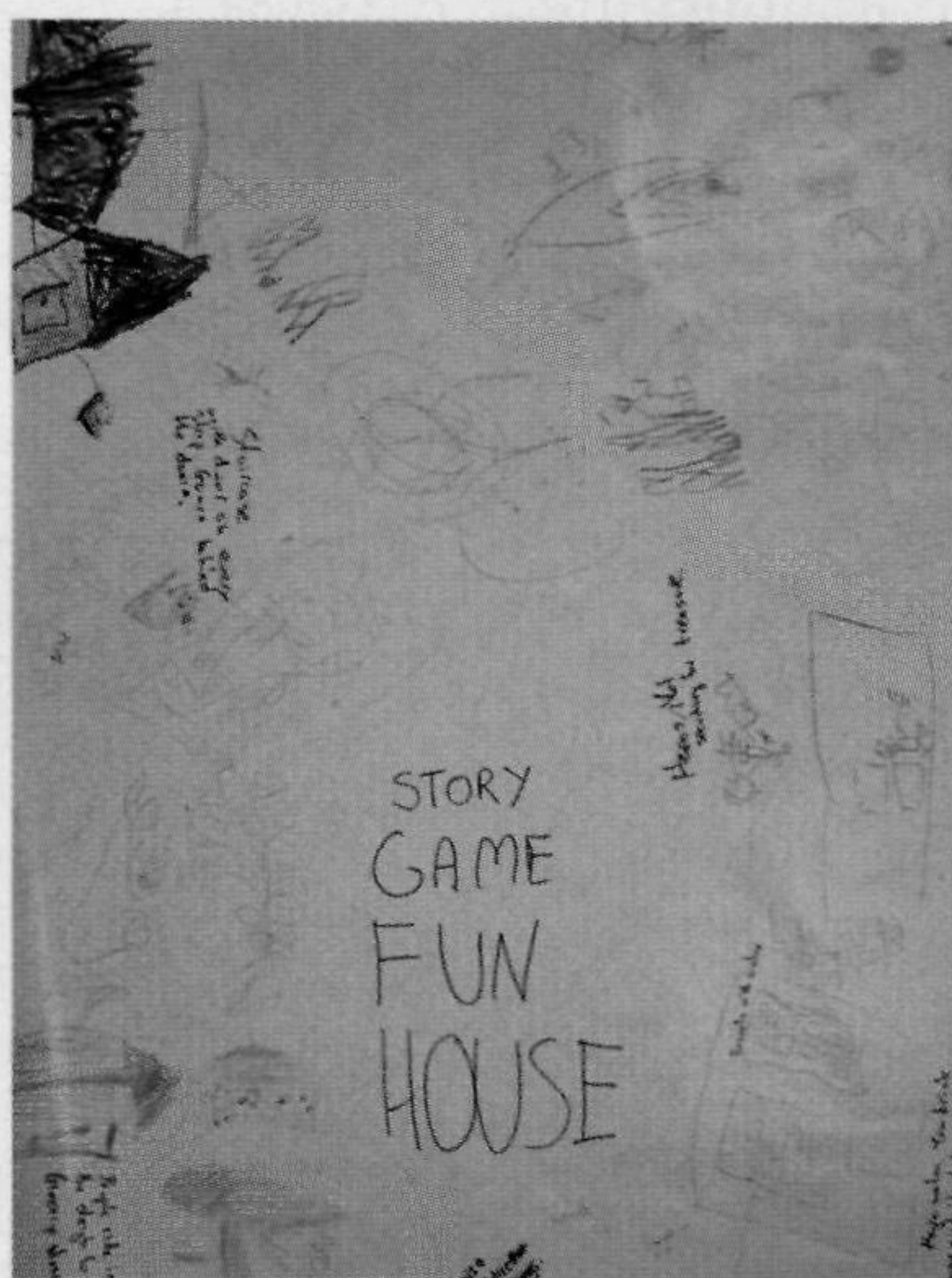


Figure 3. The final big idea: Story Game Fun House.