



Figure 3 The Three Mountains Task

Photo 1 shows the child's perspective from where he or she is sitting (location A). Photos 2, 3, and 4 show what the mountains would look like to a person sitting at locations B, C, and D, respectively. When asked to choose the photograph that shows what the mountains look like from position B, the preoperational child selects a photograph taken from location A, the child's view at the time. A child who thinks in a preoperational way cannot take the perspective of a person sitting at another spot.

Animism, another limitation of preoperational thought, is the belief that inanimate objects have lifelike qualities and are capable of action. A young child might show animism by saying, "That tree pushed the leaf off, and it fell down," or "The sidewalk made me mad; it made me fall down." A young child who shows animism fails to distinguish among appropriate and inappropriate occasions for using human perspectives.

The Intuitive Thought Substage

The **intuitive thought substage** is the second substage of preoperational thought, occurring between ages 4 and 7. In this substage, children begin to use primitive reasoning and want to know the answers to all sorts of questions. Consider 4-year-old Terrell, who is at the beginning of the intuitive thought substage. Although he is starting to develop his own ideas about the world he lives in, his ideas are still simple, and he is not very good at thinking things out. He has difficulty understanding events that he knows are taking place but that he cannot see. His fantasized thoughts bear little resemblance to reality. He cannot yet answer the question "What if?" in any reliable way. For example, he has only a vague idea of why he needs to avoid getting hit by a car. He also has difficulty negotiating traffic because he cannot do the mental calculations necessary to estimate whether an approaching car will hit him when he crosses the road.

By age 5 children have just about exhausted the adults around them with "why" questions. The child's questions signal the emergence of interest in reasoning and in figuring out why things are the way they are. Following are some samples of the questions children ask during the intuitive thought substage (Elkind, 1976): "What makes you grow up?" "Why does a woman have to be married to have a baby?" "Who was the mother when everybody was a baby?" "Why do leaves fall?" "Why does the sun shine?"

Piaget called this substage *intuitive* because young children seem so sure about their knowledge and understanding, yet are unaware of how they know what they know. That is, they know something but know it without the use of rational thinking and are sometimes wrong as a result.

Centration and the Limits of Preoperational Thought

Another limitation of preoperational thought is **centration**, a centering of attention on one characteristic to the exclusion of all others. Centration is most clearly evidenced in young children's lack of **conservation**; that is, they lack the awareness that altering an object or substance's appearance does not change its basic properties. For example, to adults it is obvious that a certain

How Would You...?

As a human development and family studies professional, how would you explain the child's response in the following scenario: A parent gives a 3-year-old a cookie. The child says, "I want two cookies." The parent breaks the cookie in half and hands the two pieces to the child, who happily accepts them.



animism The belief that inanimate objects have lifelike qualities and are capable of action.

intuitive thought substage Piaget's second substage of preoperational thought, in which children begin to use primitive reasoning and want to know the answers to all sorts of questions (between about 4 and 7 years of age).

centration The focusing of attention on one characteristic to the exclusion of all others.

conservation In Piaget's theory, awareness that altering an object's or a substance's appearance does not change its basic properties.