model building, mathematical symbols—to the extent that these have at least some aspect of recreating, reconstructing, or representing something other than what they themselves are—represent, for the person who creates them, something of her understanding. It is no clearer in these cases than in the case of language that what they evoke in the beholder is the same understanding or knowledge or feeling as that which the producer had in mind. They call on the beholder to make her own connections, in order for the representation to make sense to her.

In passing, notice how Piaget's very methodology reflects his views of language. Piaget and his researchers engage in a rather loose discussion with a child. The researcher has a number of key questions in mind, to be brought up in a standard order. But the phrasing of the questions and ensuing discussions with the child depend on the child's reactions. Piaget is criticized by many psychologists for not having a standardized format—a fixed set of questions, phrased in a fixed way, so that exactly the same words are used with each child. The point of this standardization is to guarantee that each child is dealt with in the same way. But from Piaget's point of view, standardizing the words has little to do with standardizing the problem for children. The words are only a way to get the thinking going. There is no guarantee that the same words will cue in the same way for every child. It is important to vary the words used until they make contact with the child's thinking. Reaching the child is what has to be standard. Sticking rigidly to a fixed formula can almost guarantee a lack of standardization.

LEARNING TO SPELL

The argument that we have been advancing in this chapter so far is that there is no need to give children "language tools" in order to facilitate clear thinking, intelligence, or greater knowledge. Their own use of language will always he adequate for their own thinking.

However, there is no denying that linguistic style and "correct" language have an important place in communicating with others. Children may be able to say things in their own way and make themselves understood, yet their way may be neither elegant nor "standard" and some people will hold it against them. They may be able to write things with "standard" grammar and even with elegance, but with idiosyncratic spelling, and again some people will hold it against them. There is ample justification for this. Part of the reason for standardizing grammar and spelling is precisely so that we do not notice them and can give all our attention to what is said, rather than to distracting aspects of how it is said.

But there is a conflict for teachers here. To the extent that children are acting intelligently, they will be paying attention to the sense of what they hear and read, and not to the detail. Somehow, we must turn their attention to the detail. This would seem to imply that they have to turn off their intelligence while they do this. Indeed, that is the way "correct" grammar and spelling have most often been taught.

Teachers' attitudes to conventions like this might be characterized as "running scared"—in the sense that, since there is only one right way, explorations of other ways must be avoided at all costs. But why not encourage explorations in these matters, just as teachers encourage exploration in other areas? For one thing, running scared doesn't seem to work. If seeing or hearing something the right way often enough did work, why do children keep making mistakes? Most words that they misspell are words they have already seen dozens of times. Yet no matter how often they see words spelled correctly—and rarely do they see them spelled any other way—the correct spelling does not seem to get imprinted.

On the other hand, think of how confusing it is. Let's take a prereader, who is learning not spelling, but his letters. He has happily learned the shape of a C, for instance, and draws it—but backward. "No!" he's told, "That's not a C; a C is like this." An hour later, in another prereading exercise dealing with shapes, he is expected to realize that a square is still a square when it is sitting on its point looking like a diamond! How can he make sense out of all that? A backward C looks much more like itself than does a square sitting on its point. He is meant to be intelligent when he deals with squares, moving them around and looking at them in all sorts of ways, but he is severely restrained from being intelligent in dealing with letters.

Even in learning conventions, "right ways," why not give children the chance to be intelligent? With letters, that would seem to be as simple as encouraging them to explore their shapes, just as they explore any other shapes—"Yes, you're right, that's a C" (a C would still be a C even if it's lying on its back)—while at the same time pointing out that, in writing, you draw it in one position only.

In grammar, surely the same thing can be done. As linguists have made amply clear, a sentence like "Larry never got none" represents just as much knowledge of grammar as the standard "Larry didn't get any." It's just a different grammar. It can be accepted on its own terms, while at the same time other ways of saying the same thing are explored, including "Larry got none," "Larry never got any," or "Larry didn't get none." Instead of running scared of anything but the standard form, teachers can encourage the search for all possible forms that say the same thing. And the standard can be pointed out along the way.

This does seem a bit scary. By way of reassurance, let me describe an approach to spelling that has been developed in a school in Montreal, a French-speaking school called L'Ecole Nouvelle Querbes. This approach was elaborated by Albert Morf, a psychologist of the University of Montreal, formerly of Piaget's Center in Geneva. It was developed for the classroom by first-grade teachers Hélène Pothier, Denise Gaudet, and Cécile Laliberté. The approach is slightly more appropriate to French than to English, but aspects of this approach could certainly be adapted to English.

The reading program starts with writing—not handwriting, but writing to say something. A child suggests a word she wants to be able to write. Then the class together breaks it up into component sounds. *Cousin*, for example (I shall use the French version of the word), is broken down into *K OO Z IN*. The teacher then presents all possible ways of spelling each of those sounds: *C* or *K*; *OU* or *OO*; *S* or *Z*; *EIN*, *AIN*, or *IN*. (In this respect, the method is somewhat more difficult in English. In French, the "possible ways" are more regular.) The children proceed to produce all possible ways of spelling the word. "Yes, that's one way. Any more?" The more ways they get, the better. They write them on the board, and if a child has a way that is not yet on the board, he or she adds it to what is there. When all possible ways have been produced, the teacher tells them the way that is conventionally used.

Note that instead of feeling stupid for creating an unconventional spelling, the children feel clever. And they know that whoever may be dumb, in making spelling such an arbitrary exercise, it's not they! They also know, just as well as any other child, that there is only one correct way to write any given word, and this way is underlined in their notebooks, among all the possible ways. Moreover, as time goes on they develop greater and greater ability to guess, for themselves, which is likely to be the conventional way.

At the same time, the emphasis in general is on their saying what they have to say through writing. By the time they have built up a collection of how to write all the sounds, they can write anything adequately enough for someone to be able to read what they have said. The spelling may be unusual but it is always readable, and the writing is accepted for what it says.

In this process there is, for one thing, a proper sense of values: Writing is what it is all about. The first requirement of spelling is that writing be readable afterward, and the writing of these children always is. Then, to make it easier for readers, a single conventional spelling is learned. The expressive writing of these children is remarkable and becomes better through the six years of elementary school. But this is not the main point.

In other schools of various sorts children do equally remarkable writing. The point is that these children really learn to spell, withal. They learn to spell not by avoiding wrong spellings in a panic, but by actively seeking out every possible wrong spelling! When the children start reading, they notice the spellings of new words that they read. Since they realize that any number of other spellings might have done the communications job just as well, they sit up and take notice. "Gee, is that how they spell that?"

Note too that using a dictionary to check up on a spelling is possible only to the extent that you are able to generate possible spellings in advance. You can't get anywhere with a dictionary if you don't know how to start. These children know how to start.

Finally, just as when they see a written word they know that somebody has made an active choice about how to spell it, so when they see a written text they know that somebody—some fallible person somewhere—has made an active choice about how to write it. When one child reads out loud what she has written, the other children are active listeners. Sometimes their reaction is immediate acceptance—"Oh, c'est beau." But other times they make suggestions about how else the original author might have said the same thing, and she sometimes decides to say it another way. They are, in budding form, aware of the thesis of this chapter—that the words themselves aren't the substance; they are one possible way of trying to express the substance, and they needn't be taken at face value.