



HOW THE WORLD WORKS



OR "Rain comes from a
Faucet in the Floor of the Sky."

HOW



THE

WORLD

WORKS

Where I was before I
was born. Before I
was born I was up
in the sky, up on a
planet far away from
Earth every time when
a baby was born a
Stork would come and
take the baby to the
hospital.

How I was born. Once
upon a time, my father
told me I was born under
a rock and I liked this idea.
But thought it was kind of silly.
My father said my brother was
born in a cabbage patch and I
know that is true!

This is God in
the sky. He de
livers the baby to
the mother.

When I was a
baby in Babyland
and my mom had
to be took to the
hospital in Babyland.
And we took them
in a hospital and
then I came out
with my mother
in a balloon.

New Zealand. Before I was
born I was in New Zealand
because my mother lived there
and her brothers and her sister live
there.

Contents

What Does a Child Believe? 5

Listening to Children

New Territories

Talking with Children at
Your Fieldsite

What Influences What a Child Believes? 10

Building Understanding

Putting Together
Information

Learning Continues 13

My mother lived there
for a while and her sister
lived in New England
and I was born there



Bill Crawford



Emmet Gowin

What Does a Child Believe?

Listening to Children

Do You Know What a Dream Is?

"It's a light that comes in the night."

"When I see it, it is near me; but if somebody else looked at it, it would go away."

"The clouds send it."

"It comes down from the sky into my room."

"It goes against the wall and you see it."

"A man my father knows makes them."

How Do the Clouds Move?

"They make themselves move."

"Yeah — they go for a walk."

"A giant walks along with them, or somebody must push them."

"It's the wind."

"There's a man inside who makes them move."

"Some string makes them go back and forth."

Where Did Your Little Brother Come From?

"Mommy bought him in a shop."

"From the doctor."

"Mommy still had some flesh left over when I was born. She modelled it with her fingers and kept it hidden a long time."

"From my mommy's tummy."

"He went through three stages, and then he became his real form."

"From the sky."

"From God."

Although the topics of dreaming, how clouds move, and baby brothers may seem unrelated, the ways in which children responded to the three questions were all very similar. In each case, the child made "sense" of the world-at-large in terms of familiar objects and experiences.

What may have inspired the comments about:

- dreams taking place on a wall?
- strings pulling the clouds back and forth?
- a baby coming from the stars?



Go back over the other responses and think about what experience the child might have had that would explain the ideas he or she expressed. For example, "Strings pull the clouds back and forth" might have been suggested by seeing dogs on leashes, puppets on strings, and fish on lines.

As a class, list your ideas on the board, and review them together. Can you find any patterns to the children's explanations?

New Territories

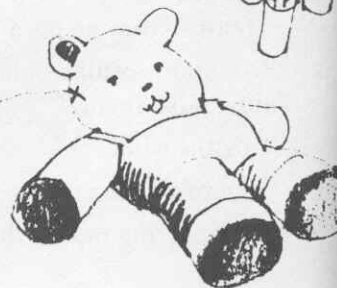
Children explain the unknown with what they know. If faucets bring water, why shouldn't rain come from big faucets in the sky? If it is true that people make films and television shows, why shouldn't it be true that dreams are human-made?

With development, a child moves into new "territories," gains new strategies for learning, and uncovers new information.

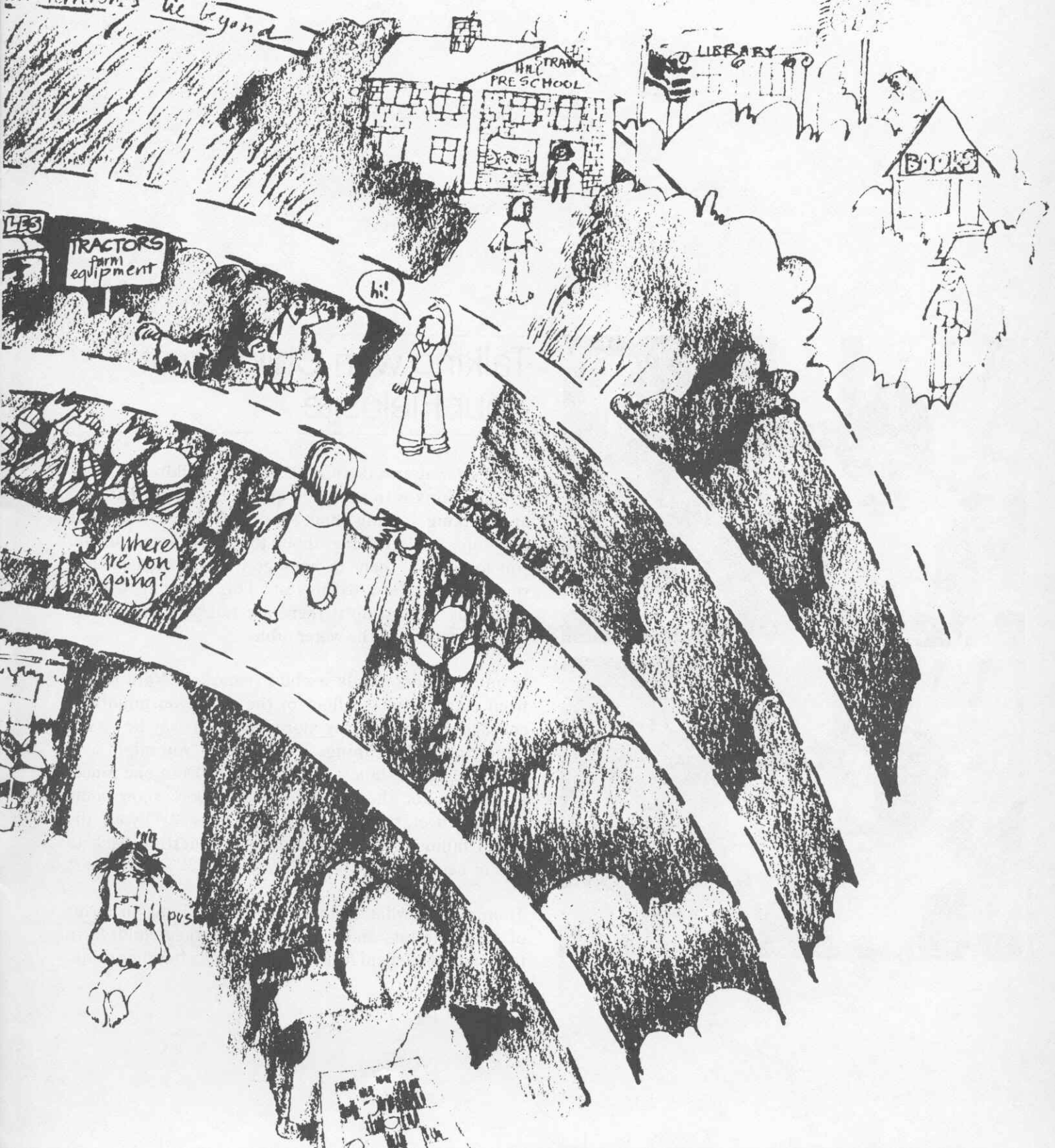


Charles Pratt

giant ted bear.



her territories lie beyond



TRACTORS
farm
equipment

HILL TRAW
PRE SCHOOL

LIBRARY

BOOKS

hi!

Where
are you
going?

push



Talking with Children at Your Fieldsite

The best way to take a look at what children at your fieldsite think is to ask them questions about what they are thinking, talking about, or doing. If children are at the water table talking about the sizes of containers, you might ask them to arrange their containers in a row from smallest to biggest. This ordering will be especially interesting if there are tall/thin and short/wide containers at the water table.

If on an outdoor walk a child remarks, “Rain comes from a faucet in the floor of the sky,” you might encourage the child to say more about the way he or she understands these things. For instance, you might ask, “Who turns the faucet on and off?” “Does one faucet make rain for the whole world?” “Does snow come from a faucet, too?” Or, if a child asks, “Why are the leaves falling?” you might turn the question back to him or her and say, “What do you think?”

Tuning in to what children say, and talking in terms of their interests and ideas will encourage children to talk and make them feel you care about what they think.



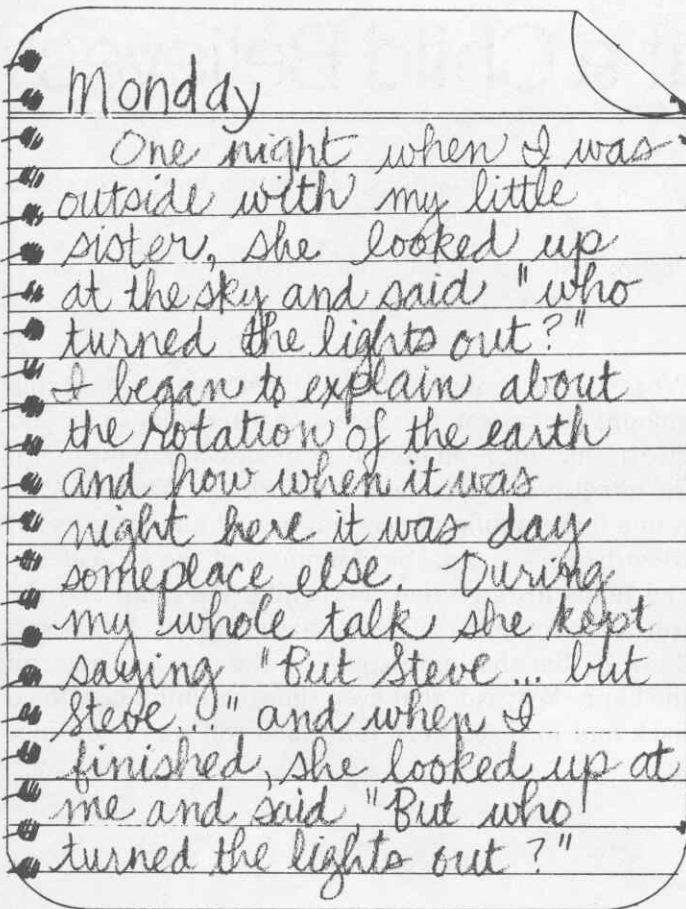


Thinking About What Children Say

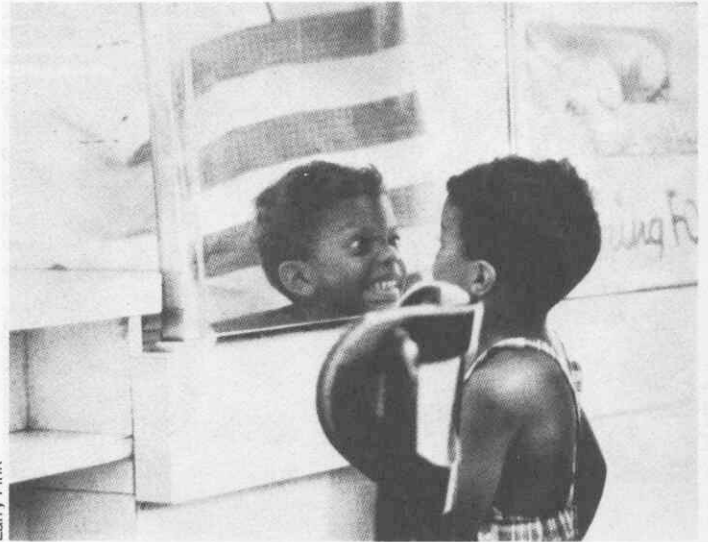
People who have studied differences between the way preschoolers and adults think have observed two things:

- Preschoolers often talk about inanimate objects as if they were living: clouds “go for a walk.”
- Preschoolers also talk about inanimate objects as if they were mechanical: “Some string makes (the clouds) go back and forth.”

In your talks with children, does it seem to you that these observations are valid? Would you add other observations to the list?



What would you have said to Steve's sister?



Larry Fink

What Influences What a Child Believes?

Building Understanding

Warren (age sixteen) watches Philip (age four) playing with clay, and joins in. They play at making supper.

Philip: Here, you could have some of my clay.

Warren: Thanks.

Philip: I need some more. I want to have lots.

Warren: (pulling some off for Philip) Here you go.

Philip: You still have more than me.

Warren: (pulling off still more) O.K., now do we both have the same?

Philip: Yeah. I'm going to make hot dogs. Some for both of us. I gotta roll 'em out. (Works really hard at rolling out a long coil. When it's all done, looks over at Warren's lump of clay.) You got more.

Warren: No, we have just the same. Remember?

Philip: No, you got more. I need it to make the plates.

Warren: No, we have just the same. I'll show you. Will you let me show you with your clay? (He rolls

Philip's hot dogs back into a lump.) Now see, is it the same?

Philip: Now it is, but not when I make hot dogs, 'cause then its all skinny and little.

What is happening here? Warren realizes that the amount of clay won't change no matter what shape you give it, that until you take away or add clay to the lump, the quantity is the same. But not Philip. When the clay is in a lump, Philip notices how round and fat it looks; when he rolls it out, the skinniness of the roll catches and holds his attention. For Philip the lump and the roll are two very different objects. What he doesn't know is that the lump could be the roll, and the roll the lump. Why is it that even showing Philip how to go back and forth between lump and roll won't convince him?

Putting Together Information

What a child believes one day, he or she may not believe the next. The explanations or ideas that a child uses today may be very different from what that same child may think in a week, a month, or a year. Children and their beliefs do not exist in a vacuum. They are continually exposed to a wide variety of influences:

- you
- parents
- sisters and brothers
- other relatives
- other children
- neighbors
- teachers
- religious instruction
- television
- books
- movies
- their own curiosity and the experimenting they do



Bill Binzer

Consider a situation in which a five-year-old child named Nancy believes that “stones are alive.” The following chart shows how her belief is played upon by a variety of influences — some that support her belief, and others that challenge it.



Why does the belief that stones are *not* alive win out? The process of “realizing reality” as adults see it is a gradual one, with lots of prodding from a variety of experiences. The next chart shows some of the experiences Nancy uses as she begins to question her beliefs.

Nancy has learned that a single word can have more than one use (stone/Mr. Stone), and that everything that moves is not necessarily alive (possibly by trying some things herself, like trying to get a stone to “run” uphill). The outlandishness of certain parts of her book, *Mr. Stone and Mr. Celery*, have made her question the reality of the book as a whole, and made her decide that it was “make-believe.” Experiencing, “experimenting,” talking, and listening bring Nancy to realize that “stones aren’t alive.”



What about you? In your journal, record some idea that you held for a long time about how something worked, and the experience that made you see it in an entirely new way. You might want to share your story with the class.

Courtesy of Smithsonian Institution Press



Learning Continues

People never really stop learning about the world: new information constantly updates or challenges the old. The mind acts as though it were an encyclopedia publisher who assembles a new edition every fraction-of-a-second.

To get some idea of how much you've learned over the past ten years, try the following project:

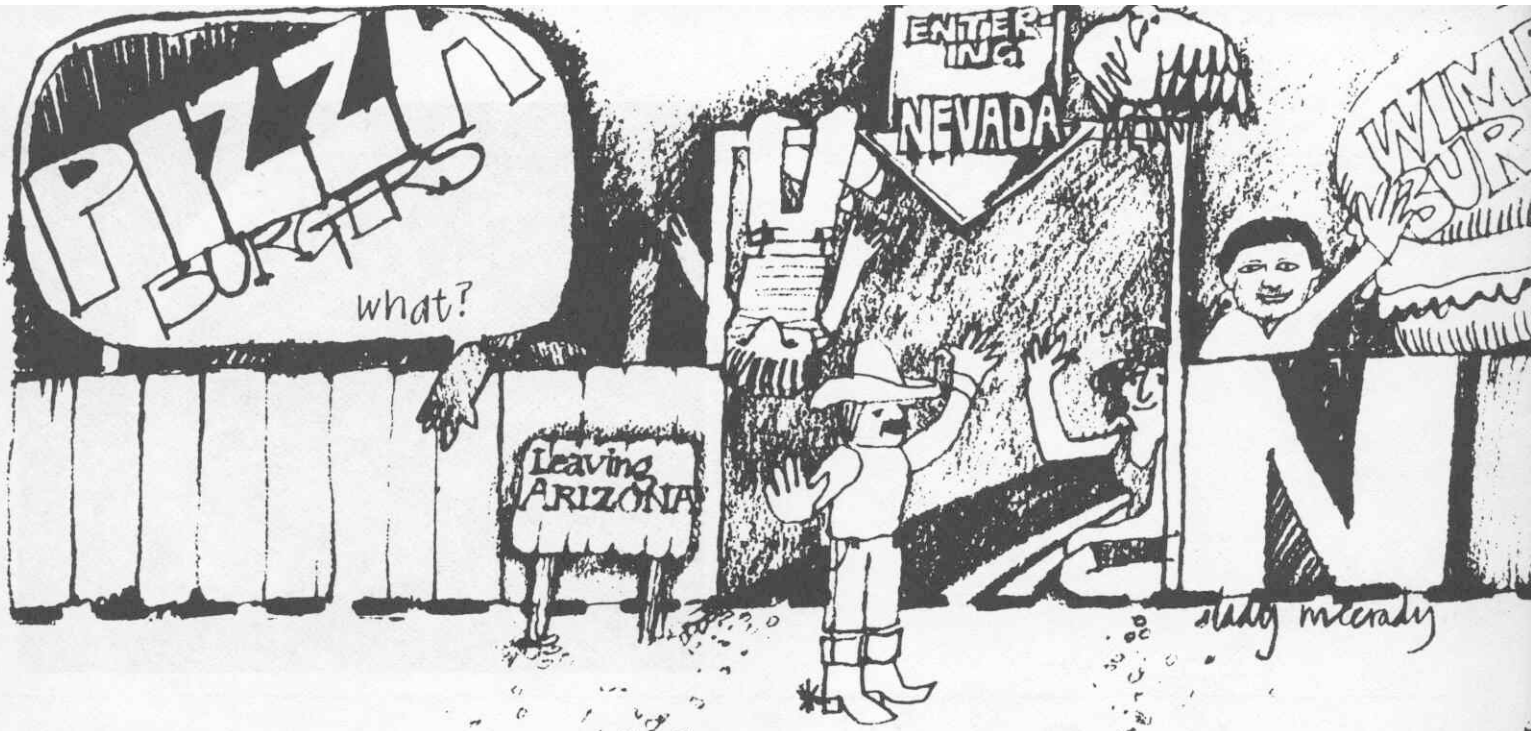
Choose a topic that will interest the children at your fieldsite — examples might be dinosaurs, tools, doctors' instruments, kittens, or the moon. Collect materials on the topic — pictures and/or objects — and arrange them in one corner of the fieldsite. Post yourself in a spot where you can easily hear any conversations about what you've brought in. Listen for clues as to where the children have seen such things before, and how they found out what they know. If you can, use a tape recorder during this discussion, or make notes on what you hear.

Back in the classroom, confront classmates with the same materials. What do they know about them? How did they find out? For fun, try to figure out how many more facts your classmates could recall about your topic than the preschoolers. You may discover that some of your classmates could discuss the topic for

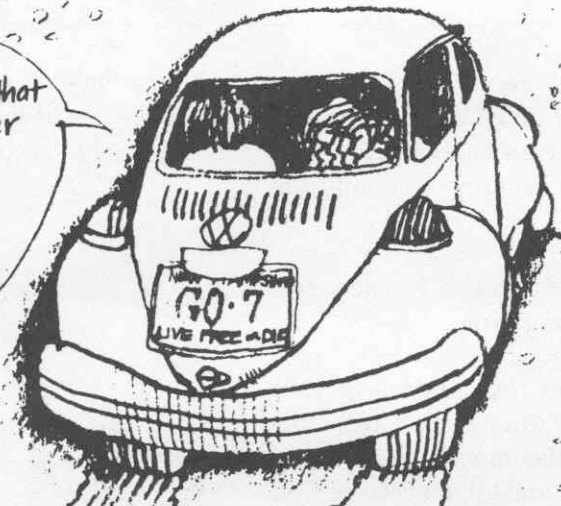
hours. Or you may find that, in some cases, the children knew — or at least said — more than your classmates. What could account for this?



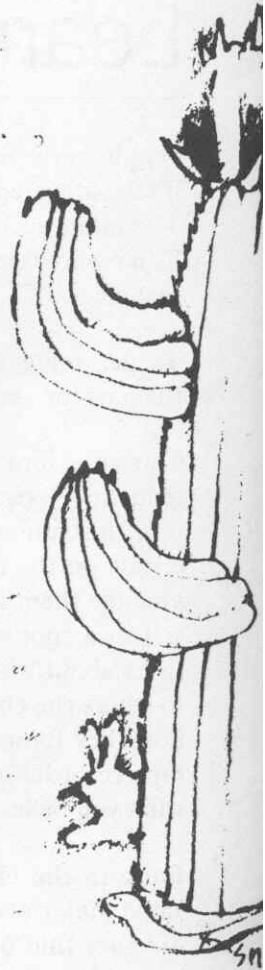
Ernst Haas

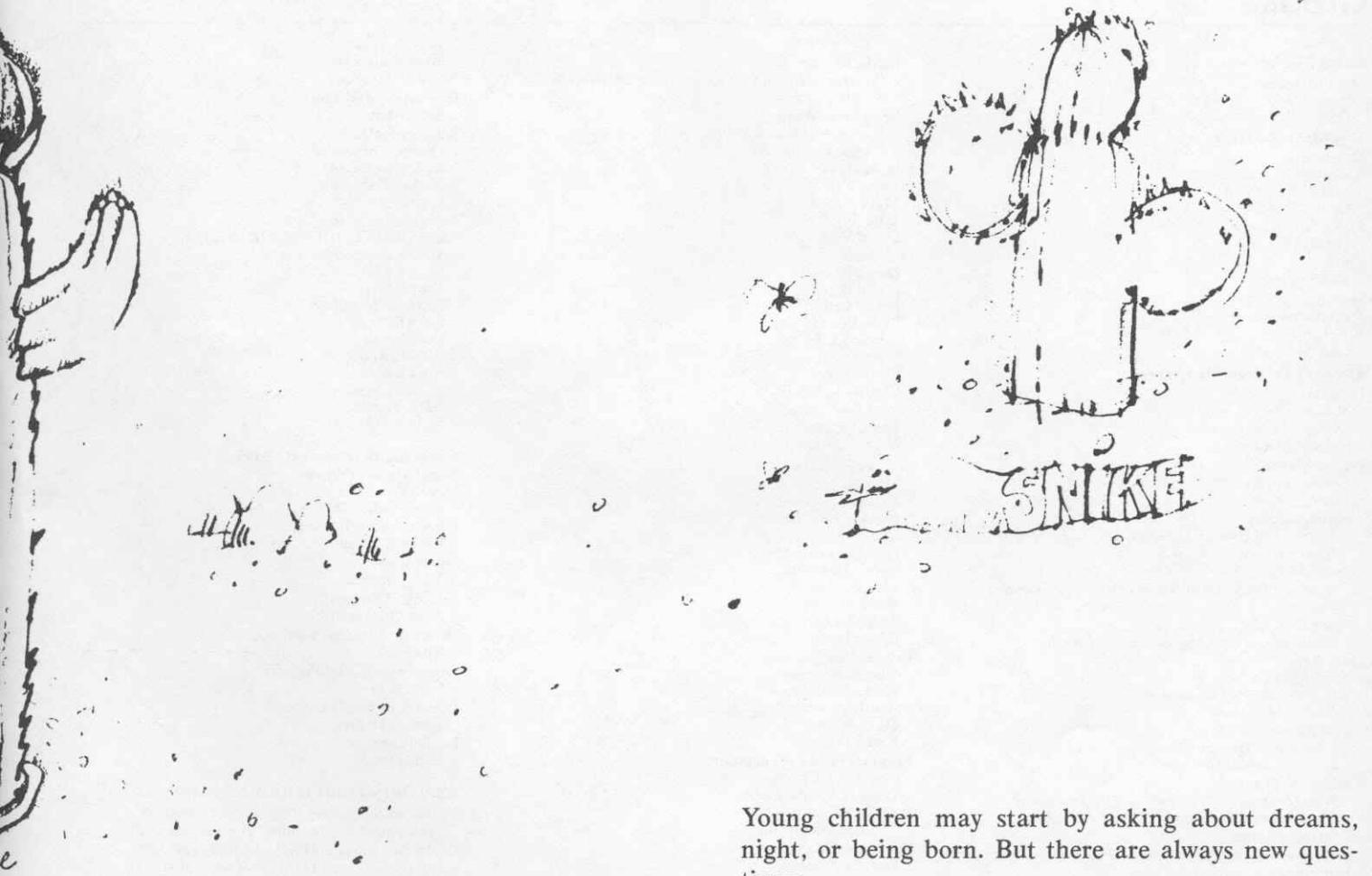
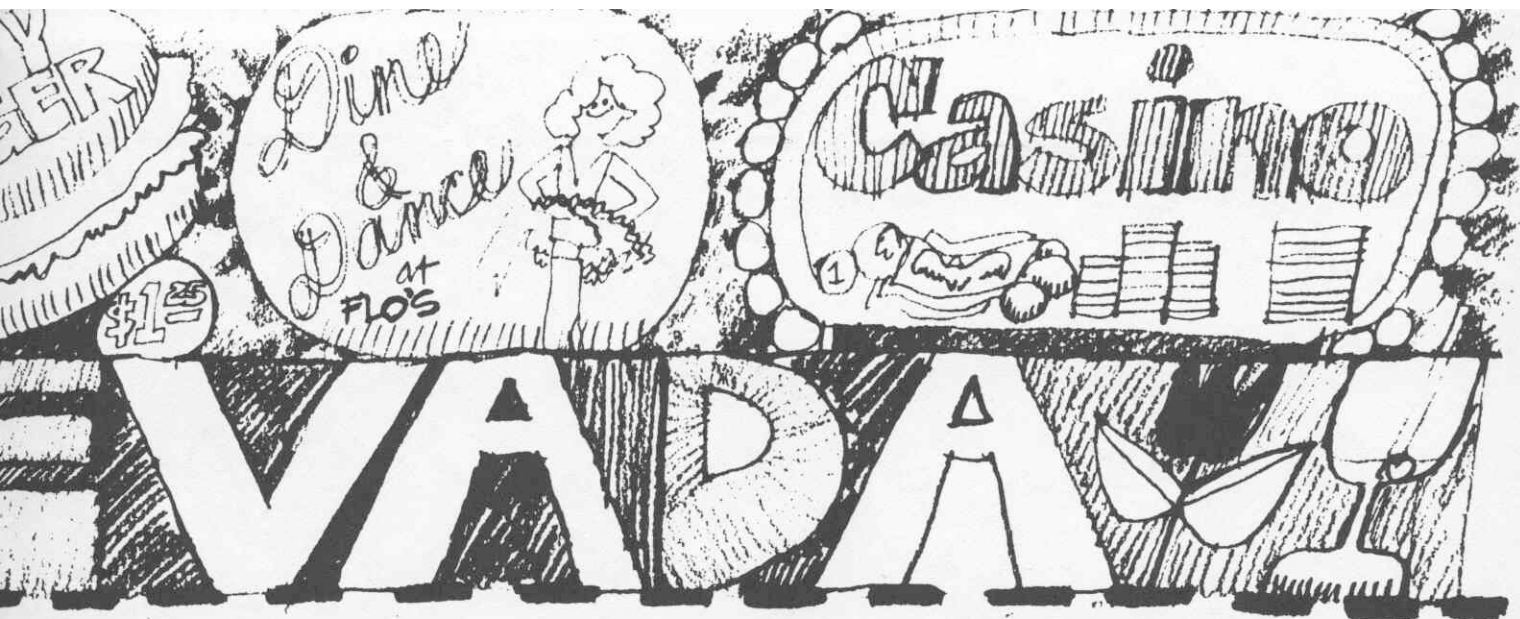


I used to believe that if I were to crossover into another state or country, everything would suddenly change color like on a map, and be very different.



Curiouser and Curiouser, sights get at each border the narrower chariot passes. Going WEST.





Young children may start by asking about dreams, night, or being born. But there are always new questions:

- “How come people are different colors?”
- “What’s it like when somebody dies?”
- “Were there always people?”

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