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ARCHITECTURE FOR CHILDREN

by

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ABSTRACT

Introduction:

Childhood today could be better. There are examples of the contemporary child showing that childhood leaves something to be desired. The project is to offer a solution for enriching childhood. The sections following the introduction help to explain the view that I have of children.

Status:

There is a discussion of the relation between the child today and the child of immediate history, between the child and his parents or adults, and between the child and his peer group. Today's child has quite a bit of freedom compared to children who were enslaved in factories during that time of the Industrial Revolution. Today the child plays at being an adult, but it seems that he does it most freely among his peers when there is no adult present.

Experience:

The child is limited in experience, and this either leads him to act as if he had experience as many of today's children do, or the lack of explanation is supplied by imagination, superstition, and primary association. There is a discussion of the learning process. Childhood should be a time of innocent learning by experience.
Imagination:

There is a description of imagination and a discussion of the relation of imagination to the child. There are reasons offered why it is most common in children, and there are solutions offered to help preserve it.

Creativity:

There is a definition of creativity and a discussion of the relation between it and the child: perception being a primary prerequisite.

Environment:

There is offered an explanation for the impact of the environment on the individual and suggestions for the kind of environment best suited for a child.

Observations:

Observations of children at home, at school, and at art class.

Demonstration:

This section includes the proposal, a written description and drawings of the children's architecture (a Children's Creative Arts Center), and the conclusion.
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There was a time when meadow, grove and stream,
The earth, and every common sight,
To me did seem
Apparelled in celestial light,
The glory and the freshness of a dream.
It is not now as it hath been of yore;—
Turn wheresoe'er I may,
By night or day,
The things which I have seen I now can see no more....

What though the radiance which was once so bright
Be now for ever taken from my sight,
Though nothing can bring back the hour
Of splendour in the grass, of glory in the flower;
We will grieve not, rather find
Strength in what remains behind;
In the primal sympathy
Which having been must ever be,
In the soothing thoughts that spring
Out of human suffering,
In the faith that looks through death,
In years that bring the philosophic mind.

Wordsworth
INTRODUCTION

This thesis began with a realization that childhood today should be better than it is.

Early each morning on a busy street in Houston there is a small group of elementary-school-aged pupils waiting for the school bus. They stand between a wall enclosing the drives and parking areas of a luxury apartment complex and the rush-hour traffic. A uniformed Negress, a governess for a while, waits with them. They stand on their grass and sidewalk strip with their tin lunch pails, and the boys throw remarks at the passing commuters.

A six-year old, large for her age, was put into a private school first grade because she was six after September first, the dividing point for enrollment in public school. Her parents thought that it would be better for her to be with children nearer her own size. She took the new-math and spent hours each evening on homework for it and other courses. She would rather have been drawing. She was ambidextrous, but her teacher wanted right-handed pupils. The little girl worked with her right hand at school and with her left hand on homework away from the teacher's supervision. She strained under the pressure of a school that needed to top the public schools. The parents wondered whether to put her back in kindergarten or to keep her with the older children; they became greatly
concerned. A psychologist finally suggested that they ask
the little girl which she wanted to do. She preferred
kindergarten. They acceded. She is happy there.

Thirty children on two widely separated air bases
came down with a mysterious disease; "...they were suf¬
fering from nervousness, continuous fatigue, headaches,
loss of sleep, belly-aches, and sometimes vomiting."^1
The cure was to reduce their television watching periods
from one-fourth of their waking hours to nothing for a
while. They all improved when the parents followed the
doctor's suggestion; when the parents relaxed, the disease
came back. The children were being hypnotised by television.
It kept them from playing out-of-doors in the time honored
tradition of restless children.

The Houston Public Library has a room for children
with 35,000 volumes. The attendance of children has been
dropping as the city has been increasing in population and
area. The librarian hopes that children will come back.

While our great society is shooting for the moon, our
children are being pushed into sophisticated roles of stu¬
dents of space-aged subjects at space-aged paces. While
our population is growing, wide-open space for childish
exploration and roaming is being slowly eaten by spreading
urbanization. Mechanization is giving the child canned,
plug-in pleasure via V-Room (a fake motor which makes a
bicycle sound like it is driven by a machine), Barbie (a
baby doll like Carroll Baker), and Johnny Seven One-Man Army guns (self-explanatory), and the greatest of them all: Television. Affluence has made children another consumer type with a $10 billion market each year. Of the twelve-year-olds who take *Scholastic Magazine*, two-thirds of the girls wear lipstick and nail polish, and almost ninety per cent of the boys use hair tonic. Eight-year-old girls are probably becoming discotheques.

Childhood has changed; as a time of innocence and discovery, it is disappearing. Children are growing up too fast to learn what in the world they are. This thesis is a proposal which aims at enriching a child's life; the architecture for this is the central theme.

From my upstairs window, I recall watching a little girl performing, not knowing that she was being watched. She was in the back yard of her neighbor's house; the neighbor was not at home. She wore the ordinary T-shirt and shorts, but she also had on a long rain coat. This was for her an elegant cape, a flowing robe; the back stoop was the podium for her throne. She much have been a queen or a movie star that time. She tightened her chin and bared her lower teeth to speak with supreme dignity, and as she uttered each grand phrase, she gestured flamboyantly, making her regal robe flow after the graceful prow of her hand with the little finger cocked in proper protocol. At times she walked down the hedge-lined avenue and greeted
her subjects; she laughed like a lady with her finger tips at her lips when a young courtier offered a jest. She was a queen for at least half an hour after I became her audience. She was alone with her kingdom. This is the type of activity to be encouraged and for which to provide a respectable and unsecretive outlet. The problem is, now, how to do it.

Research is composed of two parts: reading about children—fiction and fact, and observing them in various circumstances. The report which follows this introduction is a result of my thinking and reading and observing. Generally, it is not a scientific exploration of childhood; it is my view of childhood, as I remember it and as it appears to me now. It is primarily concerned with children in this contemporary, urban, industrialized society—nymphs learning to be a factory.
NOTES: INTRODUCTION

1 "Those Tired Children", *Time*, November 6, 1964, p. 76.


3 Ibid
During the eighteenth century, the Industrial Revolution began its sweep. All people who were touched by industry felt the sting of production and profits. Children, especially paupers and orphans, were exploited as cheap labor; greed took advantage of the complacency of the time. All lower class children above five years of age had to work, according to law, to prevent idle hands and to prepare for years of poverty and hard work. Here is an account of the conditions in an English cotton mill:

The length of 'the whole day', during which the unfortunate little white slaves were expected to work without sitting down, was generally thirteen hours, with one interval of an hour for dinner, but might extend to fourteen or fifteen hours six days a week, with some hours spent on Sunday cleaning machinery—all this in a temperature kept uniformly at eighty degrees—for the benefit of the cotton—with little ventilation, no facilities for washing or getting rid of the cotton fluff in the air. When the day was done the children with parents could go back to sleep in a home of sorts; but the pauper children were housed by the millowner in unregulated and seldom-inspected barracks where they often slept several in a bed and in shifts, leaving no time for the beds to cool.

Social legislation for the emancipation of children was necessary. The first reforms were to promote better working conditions and shorter hours. The best argument for reform was "that education was necessary in a democracy and working children could not attend school." The reforms continued throughout the nineteenth century, and in 1916,
the first child labor law was passed in the United States. By 1933, compulsory school attendance laws had been passed in all the states. This was nearly 200 years after the account mentioned above.

There has been a change in childhood. Children are now allowed to daydream, imagine, and fancy. They are given the best of what is possible. Many appear to be pampered. They have the privilege of experiencing the world meant for their fresh, vibrant minds. They have an opportunity to create from their own perception and with their own hands. Their days are filled with play. Theoretically, the joy and excitement of learning is within the reach of all. The problem is now one of leisure time.

There are several factors that have caused the change. Democracy has brought an increased importance to the individual, and thus to the child as an individual. Families are, for the most part, smaller than they were; it is easier to recognize one child among two than among fifteen. It is easier for the child to find his identity within the smaller family. It is easier for him to exert his willfulness.

Affluence has brought with it a desire for more affluence. Parents want their children to have a higher social standing than they had, or than their parents had. They regard their children as potentials for increased wealth in the future generations of the family. "If the...
country is rich, there is engendered a social optimism which tends to measure people by their future prospects rather than by the tokens of the past. "Decisions which parents make regarding their children are apt to be influenced by this attitude; they will promote any means for the attainment of the child's potential.

Ideology has changed. Humanitarianism has condemned the slavery of children in factories. It has given the children the freedom of natural formation necessary in their early years. Science, since Charles Darwin, has had a biological background. "Childhood is the period of origins, the stage of beginnings. It is the period in which so many problems arise and are manifest in their incipient stages." Families function on a more democratic structure. The authority of the parent is not so strong any longer. To a greater extent, the child is allowed to exert his own will, and his will can become rampant.

The change in the status of children has been the result of emerging democracy, rising economy, and changing ideology regarding humanitarianism, science, and family structure.

In order to understand better the status of childhood today, it is necessary to deal with the relation of the child to his parents and to his peers.

The child's relationship to his parents is connected with dependence and authority. The child is born dependent—
on his parents because he is helpless. He depends on those who can do things, who can control their actions, who can feed, shelter, and care for him. In his stages of development he continues to rely upon their experience and knowledge. They are superior, and, in deference to their superiority, he is supposed to obey their authority. The child is powerless and physically unable to resist directly. He does turn the tables on his superiors indirectly, however. Because independence is so important for the child, he must have alternatives to the world which his parents provide for him.

One alternative is to stretch or test the limit of the rules which the parents at times give him; he will usually run at the end of his leash. Another alternative is in his play, wherein he freely expresses the way things would be if he were the complete master. Play is a significant action for him.

Part of play is emulation of the adult. The little girl plays with dolls in the same way that her mother cares for a baby; she plays house to imitate her mother's daily chores. The boy plays at war and hunting like the masculine-father image fights and hunts. This game changes with the times. It used to be cowboys and Indians. Now, in Dallas at least, it is a game of Yanks and Commies called "Vietnam". In San Francisco they play "Assassination", a re-enactment of President Kennedy's death, where a player
riding in a go-cart is shot with a cap gun, and then everyone else pursues the villain and mock-tortures him.

Play can also be explained as a rehearsal for certain roles which the individual will assume as an adult. In any case, play is a rather free expression, controlled by the child's authorization.

Another way in which the child may revenge adult authority is by reciting rhymes which children have said for centuries, and which place the adult in a ridiculous and undignified position. Dignity accompanies authority, and rhymes are an effortless way to upset this dignity sufficiently for children's satisfaction.

Children also can rebel against adult authority as a whole with pranks aimed at any adult. Pranks are just another game to them, accelerated by emotional contagion of the gang; such pranks may even involve them with the law. And the policeman usually gets the same reaction because he is another symbol of authority. "No matter with what awe a boy may privately regard the police, his vocal attitude is one of amiable derision. In juvenile song the upholder of the law has the worst of every encounter." Perhaps the adults who are not parents get the worst treatment because they are authority without filial obligation. The teacher, most of all, cannot escape this almost universal ornerness. "It is considered only right, if a teacher is uncongenial, to show disapproval."
It is expected of a teacher to be uncongenial so that the children might have the opportunity to show their disapproval. They can do this with little effort. Also secret language is a notable revenge against adults who spell messages not meant for little ears. Children in many ways rebel against the obligation to obey.

I have a nephew who often sums up this attitude by this expression: "It just isn't fair; I can't help it because I'm young. When do I get my chance?" This is all said seriously and defeatedly.

The child assumes independence in ways other than rebellion. He requires possessions: dolls, miniature people which obey his will; trucks that submit to his power; idols to which to grant his love and confidence; pets to listen for his command. In these the child will confide his deepest secrets, knowing that they are secure. Some children even have to supply their comrades, completely, from their imagination. Their demand for possession becomes like a disease at times if the gifts are not limited and censored.

For some children, the making of things will satisfy them. For some, they must acquire it as a possession. In my case, I made castles for my cats out of some overturned lawn chairs and some worn out blankets. And the cats, like children, I supposed, only obeyed me and stayed inside when they were looking for a cozy place to sleep, but the shelter
which I had provided and the sleeping cats in the bend of
my elbow made me an accomplished person—an independent
being for a while, in my own world. The child can achieve
independence in possession and accomplishment.

Children seek the plumage of greatness—fine
feathers and all. They dream of such worlds,
they long for such stature, and they look for
ways to fulfill their ambitions.

The relationship between the child and parent is not
all a one-sided affair, where the child continually acts
in a furtive and rebellious manner to oppose superior par-
ents. Parents possibly sense superiority in their children
also: looks, cleverness, quickness. They also depend on
their children. The mother who gives to her daughter
everything that she never had as a young girl is relying
on vicarious experience for satisfying her own unfulfilled
desires. It is an ancient idea that the father has proof
of his virility in his son. Parents depend on their child-
ren's success to reflect the prestige and values of their
home. Adults manipulate their children to win battles.
They use their children as pawns in competition for affection.

The relationship between the parents and the child is
composed of a two-way dependency. The child depends on the
adult for guidance and assistance and love, at times against
his will. Parents depend on the child because the child
is a part of them; he is a reflection of their values;
he is the continuance of the life strain, which is, after
all, the basis for our existence.

As a separate being, the child must exert his independence. Even though he can at times actually command the adult by assuming a forceful attitude and an immovable position (a situation which becomes impossible to halt after he has tasted such honey), he sometimes has to bypass the authority of the adult in order to find his independence. The detour is accomplished through play, where the child alone is the director, and rhymes and less harmless pranks where the adult suffers a loss of authoritative elevation. The child further assumes an independent characteristic by collecting possessions and by accomplishing feats which give him mastery.

In examining the relationship between children in our society, one finds a self-contained community, a society removed from the adult world. Watch their actions when they are discovered by an adult. Even if they are engaged innocently, the activity will not only be hampered, but it will usually be ended. The society has an influence over the child which usually is stronger than the adult or parental influence.

This society is very conservative. There are games and rhymes that children have passed from child to child, for as many as two hundred years and more, without changing the basic ideas, and, in many cases, without changing the words. Here is an example of the timelessness of a play-

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ground rhyme:

(1725)
Now he acts the Grenadier,
Calling for a Pot of Beer:
Where's his Money? He's forgot:
Get him gone, a Drunken Sot.

(1954)
I had a little beer shop
A man walked in,
I asked him what he wanted.
A bottle of gin.
Where's your money?
In my pocket.
Where's your pocket?
I forgot it.
Please walk out.

Fairy tales are passed from the adult to the child. They are products of the adult. The nonsensical rhymes are largely originated and carried by the society of children. The children would rather think that the adults do not know about the existence of such nonsense. Adults have probably forgotten that they did such things when they were young.

Children "play games with exactly the same ritual and exactly the same phrases, in some instances, as the children of thousands of years ago." For example, there is "eeny, meeny, miney, mo..." which every child uses for "counting-out". This is a version of the "shepherd's score", which was the number system of the language used by shepherds in the neighborhood of Yarmouth, Scotland. It ran: "Ina, mina, tethera, methera, pin..." For eight, nine, and ten, it was hovera, covera, dik, which is probably now
hickory, dickory, dock.... The shepherd's language is no longer used, but children still say some of the words long after its disappearance.

The same faithfulness is practised in rituals and formulas within the society:

The schoolchild in his primitive community conducts his business with his fellows by ritual declaration. His affidavits, promises, notes, claims, deeds of conveyance, receipts, and notices of resignation, are verbal, and are sealed by the utterance of ancient words which are recognized and considered binding by the whole community.... Further, it will be noticed that the gestures with which the significance of the language is stressed, for example, spitting, crossing fingers, and touching cold iron, are gestures which have been an accepted part of ritual since times long before our own.

It can be seen that there is a stream that flows from child to child from generation to generation, through a strict society, somewhat separate from the adult world, at least in the minds of the members of this society.

It is only right for this group to be so tightly bound. They have had a shorter span of experience and fewer varieties of experiences; the experiences are more likely to be similar and certainly less extensive. Even with these similarities, there are inevitable differences, and these provide the society with leaders, followers, innovators, ultra-conservatives, avant-garde, those who no longer want to play, those who uphold the rules no-matter-what, and those who always go crying to mamma and wish that they had seven or 7.
had never come.

This is a most critical group. Few things escape their discerning eyes: funny names, funny noses, funny clothes, strange deformities. At times they are helplessly cruel. The basis of the gang is sociability, so they attack any deviants who would strain the processes of this social group.

They share the same attitude toward the adult world as the individual child, but within their numbers, they feel a sheltering immunity against the punishing adults. The attitude is strengthened and rebellion can be carried to greater lengths. Together, the group can find the extent of the adult limits of authority.

An architecture for this society would have to have the timeless characteristic which their lore has. It would have to be meticulously detailed for these sticklers who will learn a rhyme with the same words as the rhyme of the previous generation (a few years older), who will not let a story be told a second time without the same, minute, descriptive points. There would be hiding places to be found and then to be kept secret from the adults. There would be the provision for the gang to have a rendezvous. There would be sheltering places for the mamma-babies, but not so far removed from the social world that the child could not have the opportunity to take part if he found the inclination or if he saw where he could make a break-through into the clique. It would be a place protected from parental hin-
drances and with order maintained by "buddy" adults.

An architecture for children would express the desire for distinction from the adult world which the children as a society have. It would be a world where the children, instead of the adults, would be hosts.

It would express and promote the daydreaming which a child is able to do. It would give him something which he could identify as belonging to him. It would provide surprises and eccentric, superfluous objects for him to idolize, which he could animate with the use of his imagination. A children's architecture would reflect their spirit of pranks and play. It would not clothe them in velvet and lace; instead it would provide a program where their cleverness might be diverted toward a more self-fulfilling end. It would re-route their energy for mischief. It would not be flashy, cheap, and circus-y, but a spirited, imaginative world. It would treat his innocence, his imagination, and his creativity as wondrous virtues with great potential.

There would be windows for him to operate, furniture for him to assemble, and, perhaps, paving stones for him to re-lay in a new design. These would allow him the privilege of somehow helping to form his own world, to make it his own possession.

Children are children. They are seedling humans, free and impulsive, who need nourishment. An architecture for children would not condescend; it would assume that their
status was nothing less than that of a creature stretching for experiences in its period of exciting formation. It would take them as they are.

Not that the experience of being a child in any human circumstances is all cakes and ale, all magic and merriment. It has one advantage, however; the advantage that children are merely guests at this feast, and are not responsible for what is on the table. Our aim and desire no doubt, however far this fall short of attainment, is to insure them a fair field and every conceivable favour; and to make the feast a rather more inviting affair than the tea party to which Alice was invited in Wonderland. There was no jam, there was no cake.  

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NOTES: STATUS


4 Ibid., p. 654.


7 Ibid., p. 361.


10 Ibid., p. 11.


12 Ibid., p. 62.


14 de la Mare, Walter, Early One Morning in the Spring. London: Faber & Faber Limited, 1949, p. 5.
EXPERIENCE

There is the dream of some people that childhood is a period of innocence. The child in today's society would disprove this. Most children, now, are very full of willfulness, guile, furtiveness, and guilt—all probably reflecting accurately the values of their parents. The upper class children tend to be possessive and extremely self-centered and pampered; their opposites tend to be unable to escape the corruption of their environment. Most children of all classes have a vocabulary that would make金属ious blush, and they use it. They are accountable and responsible at a very early age, and they can fool the adult into depending on the dream that they are not.

Yet there are the truly innocent children. They are few, but they can be found. They contrast so strongly with the children with only innocent faces. This contrast shows that contemporary childhood has largely lost one of its greatest attributes—innocence.

Innocence comes before knowledge, understanding, experience, guile, and contamination and corruption. It is being unaware of the presence and power of knowledge. It is the greenness of youth without tarnish. It is the maintenance of magical possibility. It is being a bud. It is bliss. It is defenselessness.

Experience for the innocent one is a best time; it is a series of first times. Sights are new and strange and
mystical. Magic is actual; birds can fly and a child cannot; things disappear without a logical explanation and he cannot; why should the child not expect other things to fly and disappear at will. There are things which he sees every day that he cannot do.

The period of time which the child has experienced has been so short that each incident which might appear negligible to an adult, would be of utmost importance to the child because it is such a large part of his existence. He does not understand that a toy can be easily replaced. Another toy simply would not be the same one. He places paramount values on the most seemingly insignificant things.

Adults with all their experience are bored by the common things which excite the young child. He is not easily bored, if he is still an innocent one. The world is full of novelties. Even when new objects are not near to interest him, there is the fascinating movement of his own hopping, squatting, pivoting, and tip-toe ing. He has built-in entertainment. When even that becomes familiar, he can fall asleep immediately, and in any person's presence, because certain things are excusable for small children (in their innocence there is a kind of immunity). There exists the possibility that the small child may never experience boredom. However, it seems that boredom is a prominent characteristic of the contemporary child.

For the innocent one, the commonest of interests may
cause great enthusiasm. The junkiest place could probably evoke the most romantic sentiment; the humblest servant, the most honored adoration. Until the various iconoclasts begin their work, all the world is full of marvels. Every being and object and breeze and light ray has a significance beyond the mere physical.

Reality for a child is a changing thing, much like a fluid. At the least inclination it flows to another area. It is hard to nail down or to contain. It is seldom the reality of an adult, which is the actual physical world and probably very little more for most adults. For the child it is a process of cultivation and weeding of experience to find what is most real, or what is most real to his superiors, or what is most lasting. Enthusiasm, unfamiliarity, and a lack of understanding keep the liquid reality searching for a containment.

Children's dreams lead them to worlds which adults have forgotten. All things, alive or inanimate, have the ability to take on human characteristics—anthropomorphism. (This is the appeal of cartoon.) They tell real stories about animals who do things that humans do; children speak of being able to fly like a witch or Peter Pan or Mary Poppins. They ponder about living like a rabbit in a hole or a fly on the ceiling, about being able to walk upside down, or crawling inside a flower like a bee, or getting under a mushroom like a leprechaun. They are unaware of
what is physically impossible, or by choice they ignore it. They are absorbed by what is magically likely. Using their imagination they can accomplish these things. They can make a pigsty into a castle, a deserted house into a mystery, and they can experience what it is like to be inside a flower or a rabbit warren. Reality is not a concern of innocent children; they experience many things that are not adult-ly real.

When the child is confronted by something that he cannot understand, he either does not let it concern him, or he will supply the needed information by associating the problem with any thing which comes into his mind first, which is often hard to re-associate by the very logical adult, and may even be interpreted as a lie. Virginia Cary Hudson, the ten-year-old authoress of O Ye Jigs & Julep!, demonstrates her remarkable associative power:

Everybody grows wings in Heaven, and then I can fly, and that will be wonderful. I haven't decided yet where I will go. Miss Ruby Porter says 'Paris is beautifyl in the Spring'. Maybe I will go there. I sure hope I don't get already for the trip, and then start molting like my canary bird. I sure will need all of my feathers to get across the ocean and back again to Heaven.

and:

Miss Lulu Johnson comes to the library looking for her ancestor. I wonder who she thinks she is fooling. Miss Lulu knows ancestors are on walls and in coffins. I bet if she ever finds him in that book he will be mashed flatter than my cabbage rose.
Miss Hudson, at the time when these essays were written, was one of the innocent ones; her childhood was Victorian. Her naivete is now a delight to the reader, but more than that, it gave her pleasure to speculate about unknown things. Today's precocious children fear their childish speculations. They long to be older than they are. They assume a knowledgeable and worldly countenance and play the role of a much older person. It is harmful that they become used to so much chicanery. The child of today tends to shy away from his gift of primary association to explain situations. Instead, he acts as if he knows the answer and remains silent. He fails to relate in any way the events that puzzle him, and his life tends to become a series of factions instead of a factual and fictional continuum.

If the primary association fails in an innocent child, he will supply the information directly from his imagination—which is even more likely to be misinterpreted. He has difficulty in distinguishing between memory and imagination. The innocent child reacts in the same way that prehistoric man did when he tried to account for the strange actions of nature. Indeed, the childhood of the modern individual and the so-called childhood of mankind is strangely parallel. This fact is not so remarkable to a tormented mother who would be willing to give evidence to prove that her child is, in fact, a barbarian; it can also be affirmed by anyone
who has read William Golding's *Lord of the Flies* and has recognized the similarities between these veritable savages and children that he actually knows.

The innocent child and the popular savage have a similar lack of complexity of experience; they abound with superstitious notions about the strange events around them; there is a lack of knowledgeable explanation. In the same way, the child and the savage substitute imagination for fact. Many of the tales, rhymes, and games which delight children have direct relation, according to Henry Bett in his book, *Nursery Rhymes and Tales*, to myths that primitive man originated to help explain his universe to himself. "Jack and the Beanstalk" is connected with myths about life after death; "Little Red Riding Hood" is an explanation of the rising and setting of the sun, the little girl in red being the symbol of the sun, and the wolf being the symbol of night. Bett says that "Jack and Jill" somehow helps to explain the movement of the tides, and "Beauty and the Beast" is the remnant of the superstition of a "tabu". "Jack the Giant Killer" reflects cannibalism, and cannibals today are still able to smell out a victim in the same way that the witch in "Hansel and Gretel" sniffed for a creature to pop into the oven for supper. One of the more surprising relations if "London Bridges Falling Down": many early people believed that for a structure, particularly a bridge, to remain erect against
the forces of Nature, they had to please the gods with a human sacrifice interred in the foundation of the structure. It was usually a "fair lady" who was sacrificed! When a child is called an uncivilized hellion, there might be a valid explanation for such an epithet. The child is a combination of innocence and savagery.

Now with a framework like this, as if we were trying to manage an eight-armed monster, we try to teach them to become more mature and more civilized human beings. They are easy to influence if the target is vulnerable. They are not easy to mold if they have that target well protected with early prejudice and immunity to a reasonable argument. If they have their minds made up, it is virtually impossible to persuade them to the contrary. They are merely unaffected by logical argument, and likewise, they do not have logical, self-justifying defenses. Their only defense is to "scuttle away into their impregnable burrows."

If the child is to be educated in any way, that is, if we are to provide the opportunity of experience so that he may grow, we must take him as he is, at the present. In order to bring him to a new experience to broaden his scope, we must relate the new to what he has already experienced. Of course, his knowledge is very limited, but he has the enthusiasm for more, and he has the capacity to learn. He has a language of his own, and to teach him is to begin in this language. Teaching must be a key formed with the
fitting shape to open their locked understanding. A bright mind may seem dense only because the door has not been discovered. Once that door is found, the slightest snowball may become a mighty avalanche—for good or for bad. The discipline must depend on the method of teaching it, the surroundings where it is taught, and the kind of person who tries to teach it. If these are poor, education will not progress.

There are several facets to the way in which children learn, and they do not occur separately. One facet is sensory perception. The baby discovers who his parents are and what people are not his parents, by learning the distinction of hearing their different voices, by feeling their various touches, and by seeing their faces. He learns what hot means by feeling a burn. "All life is an echo of our first sensations, and we build up our consciousness, our whole mental life, by variations and combinations of these elementary sensations."4

The child Helen Keller, being blind and deaf, had to learn everything by the sensation of her touch; even though she was so limited in her senses, she was able to learn. The touch was given meaning because it connected with something that was within: the instinct, the second facet of learning. By intuition she knew about a mother, a father, a loving doll. By feeling the face and embrace of her mother, she recognized the Mother of her instinct. Love
was a transformation of her instinctive attachment.

A third facet of the learning process is the association that comes between the sensation and the instinct to connect the two into an understanding. The world for Helen was broadened beyond her sentiments and sensations to comprehension when she finally realized the connection between the word "water" and the cooling, flowing liquid that quieted her thirst. She associated a symbol with a sensation, and this opened the door to words and meanings and knowledge.

A fourth aspect of learning is the elimination of associations that are false or misleading. In the evolution of Western man from the savage who explained by free association and imagination, certain things were empirically seen as untrue, and they were consequently dismissed from the memory. A system was imposed upon the free association to limit it. The new association was subjected to a selectivity of perception. The child had no complexity in his experience, no length of time for the empirical. His process of learning is by an association still freed from limitation and censorship. It is an association of the sensations and the instinct, which is partly a composite of the previous sensations and partly the basic intuition of the human being.

Each day the child grows intellectually by participating in the world around him: seeing the sun rise and
set, watching a seed grow into a plant, flying a kite, watching a bird build a nest, experiencing himself grow larger. He has a desire to experience everything within his reach. He is drawn to high places in trees or to a ferris wheel because there is danger to be experienced, and thrills and fear. He is preoccupied with horror, mystery, magic, and death, as well as real, daylight incidents. These again are new compartments of life of which he has not had enough opportunities to experience. He is superstitious because he just does not know what lies before him in a new day, or in the darkness, or around that corner, and there is always the comfort of knowing where there is shelter or where the light switch is found.

If childhood is a time when the embryo is being formed by experience, why should the child act as if he were already a sophisticated master of experience? The six-year-old sophisticate may have been around the world (and this is not uncommon today), but he has rushed through experience. He yet has not lived long enough to see his peers mature, to conceive a child, to see his own past objectively, to bear the burden of responsibility, or any of the other experiences which a mature person has earned. The child would like to be mature and respected, but he cannot put on maturity and respect like his T-shirt; he cannot brush away immaturity and the obligation to obey like he brushes his teeth. He should instead grow, un-
rushes and without anxiety, and earn his honor.

Childhood should be a time for feeling, seeing, and hearing; thinking is minimum. Speech is sometimes eloquent in its simplicity and freshness. It is more useful to the child for getting what he wants than the grunts and pantomime that it supplanted, even in its crudity. Adults can interpret almost any word as a whole sentence of meaning. Speech for the child, other than the practical uses, is either chatter or performance, and other than his fantastic stories, seldom an expression of what he thinks or feels. Too many things are going into the child's mind for very much to be coming out of it. For his own expression, the child relies on other mediums: dancing, humming unformed melodies, striking out at opposition, throwing a tantrum, reciting ready-made speech in a nursery rhyme or a jingle, or drawing a picture.

In expression, innocence, experience, reality, and many other aspects, each age has its distinction, but the "mere age of a child can easily deceive us as to the powers of his mind. Children also look young, and in much act so similarly that we pay them only a childish attention, and suppose them to be much of one kind." Their minds at the beginning, as far as we know, are voids with a particular structure. The emptiness begins to be filled at a very rapid pace, but it slows as he matures. When he is young so many new things are coming within the range of
his experience at so fast a rate. For each child there is a unique sequence of experience; children do not learn at the same pace or even from the same object or subject matter. In any group of children of the same age, the experience is quite varied. Of course, each age has its similar, general characteristics, but for the most part, they are the stages of physical growth: "...in all generalizations concerning humanity and particularly children, we must... keep sharply in mind the individual. Norms and averages are a convenient and useful means of information. But no child is in all respects either average or even normal."6

There is quite a range in heights, sitting and standing; there are differences in their physical requirements. There are also distinctions other than physical. The younger child, around five years old, is still a freer individual, involved with his own actions and being, even resenting the presence of others. Around eleven, he becomes a member of the society around him, greatly concerned for the people who are similar to him; he is then more concerned with the approval of the peer group than the adult. The younger child, however, is concerned with appeasing the adult, and his conduct is reflected mainly by this. The older child is annoyed with interference from the adult world; the younger child is more likely to be annoyed with interference from anyone. While the five-year-old is stimulated by sensation primarily, the eleven-
year-old is involved with acquiring skills in all kinds of actions. The younger child is still affected by superficial and immediate gratification, while the older child is involved with storing information in his newly useful memory for long-range satisfaction. The attention of the younger child is not easily held. The older one has a new capacity of verbal thinking that allows him to dwell on subjects and problems. Experience for the younger child is still involved with basics, while the other child has had more varied and complex experiences; imagination for him has more perceptive material which has been "greatly refined and clarified." For the five-year-old, the world is more completely mysterious, even his own motor-abilities are marvels; for the eleven-year-old, the world is filled with facts and feats to accomplish, still with a great deal of mystery and wonder involved.

Children are storehouses for all kinds of information: useless and useful, astounding and dull, correct and misinterpreted, logical and illogical. The younger child is enveloped in fantasy, while the older one is beginning to be concerned with order as he yet has some of the old superstitions governing his actions and thoughts.

Even though the process of growing up has its various stages and characteristics, it does not follow that the best learning situation would be one where the children are divided according to age groups. The best learning
environment would be a multi-aged society, because there is no distinct time when changes occur for all children. The human unit is hard to categorize. Categorizations tend to limit the potential height of the individual to the height of the age group average. Children should not have their potentials limited. An approach better than categorization would be for children of all ages to have the experience of coming in contact with each other, learning in an unstratified group. It would be a more natural society, where the individual was free to choose, where innocence and experience could be compared, where they could give life to each other by their very distinction, where the child would have the opportunity to see more of life than just his own age group. "Assorted ages of children and teachers need to work together, sing together, laugh and play together now and again if there is to be respect for the contribution each age has to offer. People of assorted ages need to spark each other."8

An architecture for children should not separate them into categories, either by ages, sizes, capacities, classes, or any other category. It would give them the opportunity to make their own choices, unhindered by imposed, unnatural orders. It would provide each person the opportunity to learn what another age thinks and does, what it has to offer him. It would at the same time satisfy the complete fantasy of the five-year-old and the beginning of logical
order of the eleven-year-old by reflecting what they both have in common: an appetite for mystery, adventure, and fantasy. It would satisfy the intellectual interests of the younger children with things to stimulate their sensations; and it would supply the older children with the suggestions of order.

It would provide a physical environment for children from thirty-four inches high up to fifty-eight inches; it would have a variety of furniture sizes for this range of children sizes.

An architecture for children would provide elements which would give the children new perceptual experiences—experiences with nature and growth, trees, grass, flowers. It would treat the pseudo-sophisticated six-year-old as if there were a world, right there, which he truly has not really seen before; there would be things, which he had pretended that he knew, provided in this environment for him to learn and to delight in the process which he had bypassed.

An architecture for children would give them new things to feel, hear, and see. The environment of virginal Nature is necessary for the child to obtain a picture of the universe where he lives. It would provide space for his more productive expressions: dancing, singing, speaking, drawing, rhyming; it would give him an outlet in this way for the heightened perception which the
architecture in an idyllic setting would afford. Its spirit would reflect the mystery and magic which delight him.

What is magical architecture? Ravel wrote magical music in his *Mother Goose Suite* by making the instruments in the orchestra sound like something besides what they were: bells, gongs, birds, beauties, and beasts. He provided elements of sounds which could be associated with elements of the fairy tales told by the music. The same tendencies to make one thing appear to be something else could be used in architecture. Magical architecture would be living-sized forms which hinted at being something besides buildings, not imitative, but associative.

An architecture for children would tweak their primitive superstitions with hints of the supernatural. It would reflect their fluid reality. It would reflect their innocence and precocity, their savageness and greenness. It would give them the opportunity to exercise anthropomorphism by providing small animal-like sculpture to which they would give life with their imagination. It must be of such universal significance that they would not shun it as a sham as they grow past these stages into wisdom and experience.
NOTES: EXPERIENCE


2 Ibid., p. 31.


5 de la Mare, Walter, op. cit., 72.

6 Ibid., p. 63.


Approaching the subject of imagination is like approaching the wind. Wind itself cannot be seen but its presence can be felt and the results can be found. Standing one place we cannot tell from where it has come or to where it will go, but we may discern the direction as it passes. Meteorology may determine its origin and forecast probable change, but meteorology and other physical sciences are old men, while psychology, which studies imagination, and the related physiology are relative babes. We can only draw metaphors about the mind and its functioning and hope that they provide at least near-accurate assumptions. No one has witnessed the working of the imagination, but we have seen the results and we can assume its origins.

Under the sway of imagination we find ourselves in strange situations, commit unfamiliar actions, and meet unknown people; we change our personalities, reshape the past and probe the future.

We know that children are imaginative; poets are imaginative; an inventor is imaginative. These are people who find something new, original—something not repetitive and not imitative. In the person who is able to adjust to an unusual or unfortunate situation and is able to create order and justice out of chaos, there is an element of imagination. There are connected words: inspiration,
perception, symbol, and image. These are the most that we know about the process of imagining.

We do know that there is more than one kind of consciousness. There is the "mental activity in our state of being preoccupied with external reality—with acting." This is the daylight of our mental activity; it is the social part of our being, the here and the present awareness: the conscious. There is also something that is the counter part of this: the subconscious. "The unconscious is the mental experience...in which we have shut off communications with the outer world, are no longer preoccupied with action but with our self-experience....Both conscious and unconscious are only different states of mind referring to different states of existence." The unconscious is a part of our mind that directs much of our consciousness. The subconscious is the most personal part of our being; it is at the basis of our individuality. Within the subconscious is stored all our memories, dreams, wishes, fantasies, perceptions, fears, and images. It is filled by our sensory-perceptive imprints and the impressions of our experiences. No one has seen it; it is the antipodal section of our mind that is not concerned with physical limitations. It is an unexplored darkness related to our thinking, remembering, learning, dreaming, and imagining. All originate in the subconscious.

At times there is a translation of the subconscious
subject matter into symbolic form appearing our conscious state. Dreaming is this type of mental activity. The symbol is an image "whose content is assimilated to the desires or impressions of the subject, and whose meaning he fails to understand." The dream image is a result of some activity which has made an imprint of our emotional needs on the storage of the subconscious. There are dreams which which are a result of our wishes; there are dreams in which subjects from conscious state are represented in new forms. There are dreams where we recall an unhappy experience, and there are those which are nightmares resulting from fear and wishes, disguised in the image. There are dreams where we are punished. There are those "which are a straight-forward symbolic translation of an immediate organic stimulus...." Dreams are uncontrollable. They occur as a result of conscious mental impressions of fears and pleasures. They are a type of imagery.

Remembering is the compelling of a memory image from the subconscious. Memory is stored in the subconscious and is a holdover of a past experience in varying degrees of definiteness. A particular type of memory image is the eidetic image. This type of imagery is found mainly in children. It is the ability to call forth memories of experiences into images which are more vivid than the actual experience was. There is one case where a boy was able to work mathematical problems with a slide rule which
he saw in an eidetic image. There is speculation as to why it disappears when the child becomes an adult. It is probably because most adults think in words and most children think in pictures. The phenomenon can be encouraged. William Blake had trained himself so that he could call forth the image at will, and he taught his wife to be able to do the same. Of course, the eidetic image is an extraordinary image of memory. Ordinary memory is more vague. The important point is that the experience has been previously perceived in the conscious state.

The imaginary image is not so closely related to an actual experience. This image is the result of some kind of magic alchemy that has taken place, using perception and matter that is probably akin to inspiration, in producing its symbol. Some new association has occurred in the mind. What the imagination produces has not taken place before, or it has been sufficiently rearranged or disguised so that it appears in a new form. This, then, is the imagination: it is seeing (or hearing in the case of musical composition); it is the compelling of a virginal image to come from the darkness of the subconscious into the daylight of the conscious. A person may voluntarily provoke the visionary experience of seeing, but it is largely accomplished by submission, receiving on an involuntary basis after making the environment inviting to the image.
There are atmospheres, moods, and influences which encourage and those which discourage the provocation of imagination. If the person is in a mood of high intellectual stimulation, if he is devoid of unnecessary exterior censors, if he is not accustomed to jog-trot routine, and if he has exercised his imagination so that it is in condition, the atmosphere is more inviting to the appearance of the image; it is more likely that the image will appear to him. Successful imagining depends on a healthy, free communication between the two parts of the mind. When this connection takes place, a creative flash occurs.

Of all that we know about imagination, we know best that it is very common in children. In the child, the fluid reality accompanies a freedom between the unconscious storehouse and consciousness. He has the ability to make astonishing and quick associations between things, he has keen memory, and there is a lack of culturally engrained censors.

He has...a clarity of association which is not yet stunned by verbal labels nor blinded by self-regarding calculations. Intuition takes the place of reason. A sense of timelessness makes his presence eternal and space so fluid that a dark cloud may be Africa or a flower bed a continent.

Most of what is going on in the child's mind is the working of the imagination. Even though the memory is actively working, it has not the abundance of experiences to be full. As stated previously, the activity that goes
on in the child's mind is mostly through objects and pictures. Adult thinking is more the manipulation of words. The child has not sufficiently mastered speech as thinking, and he must rely on the limited experiences and perceptions represented in symbolic, pictorial form. Also his eye is as yet uninfluenced by the customary views that the rest of the culture accepts; he has a new, innocent, fresh perspective of the world.

In some period of change that occurs in the child's maturation, he is apt to lose some ability to imagine, at least for a time. Possibly too many facts supersede the need for the imagination to answer questions for him. Possibly he becomes self-conscious with imaginings because they are childish and he longs to be an adult. And perhaps the cultural censors, the repetitive society, become too strong an influence on his actions. The world is no longer new to him, and he is no longer adulated for his precocity. He, as a maturing individual, is encouraged to approach the world as a calculator without the fantastic nonsense that he was allowed when he was green.

Today we are becoming concerned that perhaps our children are maturing too fast, without fully enjoying the freedoms of childhood, and perhaps they are missing essential aspects derived from this freedom of their formative stage.

The problem of imagination and creation in children
should be one of encouraging the action. We should help the child to enrich his perceptual experience by helping him to look at things with keen observance, to know what the essence of even an everyday object is; "the fact that children see objects a hundred times without acquiring consciousness of it suggests that we need to converse with children about the commonest things." We should also give the child stimulation and encouragement to exercise his freedom to imagine. We need to provide an atmosphere that would perpetuate this possession of his. We must provide material for his associative powers: metaphor-makers. We must provide experience for his awakening perception. We must also shelter him from the calculating, bureaucratic, industrial society until he has first become human. We must give him new, unrepitious, fantastic things. If the child is to exercise his imagination, he should be given a boost in seeing these beings and happenings which occur in the remote parts of his mind.

We should also strive to prove to the child that his imagination does not have a functional limit; it should not be reserved only for creating works of art or even self-expression. We must show him that it is possible to be creative in all parts of his life: when he is doing chores around the house, when he is walking along a street, when he is looking at his reflection, when he is flying a kite, playing ball, or during the familiar act of going
to bed. It is necessary to show the child that there are practical, prosaic dimensions to the imagination as well as the poetic. His ability to combat the hum-drum life that so many people lead today is going to depend on the extent to which he can rely on his own imagination to transcend the drudgery.

An architecture for children would show that care was taken in even small matters, that even door knobs and window latches were designed with the intention of stimulating his every action with the possibility of imagining. It would give him suggestive form—organic form; incomplete geometry left for his pictorial, imaginative mind to make the completion. There would be an intangible quality to the architecture in the same dimensionless characteristic of his imagination. Imitational, conventional, or geometrically complete form "presents itself immediately, gives imposition and leaves no room for human experience in time." 9 Whereas an incomplete, dimensionless expression "although devoid of visual elements for abrupt association, has its suggestive content allowing for man's persuasive mind to grasp and digest for itself." 10

An architecture for children would stimulate their natural tendency for imaginative thinking. It would establish a mood of the unusual, the unrepétitive, the fantastic. It would be as Alice saw Wonderland: "For, you see, so many out-of-the-way things had happened lately,
that, Alice had begun to think that very few things indeed were really impossible.

Although the expression should avoid the pristine and the austere, it should not be a cartoon. The child would too soon mature beyond it; he would soon exhaust the associative material. If the architecture were ideal, it would be a fine art, a timeless classic. Any architecture should be as different from Disneyland as Lewis Carroll is from Looney Tunes. One is the delicate imaginings of a person who truly loves and understands children; the other is a flashy, commercial fantasia in the tradition of Madison Avenue materialism.
NOTES: IMAGINATION


3 Ibid., p. 41.


5 Ibid., p. 180.

6 Rugg, op. cit., p. 71.


10 Ibid., p. 60.

"Imagination is just seeing, but conception implies comparison."¹ "The mind is not merely a warehouse, it is also a manufactory, never idle and incredibly prolific."² Out of a possible chaotic or vague vision comes the promise of form, and the expression of this form is what we call craft or art; "...art is the formed expression of imagined conception. This concept joins form and imagination, for the imagined process. The product of the artist is his statement of what he sees, his way—but with form."³ If the expression has an element of transcendency, if it "has a meaning beyond itself"⁴, it is referred to as fine art. Otherwise, the expression is a craft, and it is this with which the child will be most involved. Although children do at times reach the level of the fine arts, it is not the primary aim of encouraging the natural creativity to ask for fine, professional works of art.

The ability to see potential expression of a form in the midst of a vision and to stabilize it is creativity. It is at the same time the making of something new. Primarily and essentially creation is the forming of something which before did not exist, but this is impossible since no matter can be created or destroyed. This creativity on the human level is the changing of the form of the matter. Creativity is being original. It is supported by
the imagination; without it creativity would not exist; it would be mere imitation which the person produced.
Without the produced expression, imagination would die unnoticed, a seed on concrete pavement. Creation is the action counterpart to the passive image; "...the subconscious cannot create art."^5

Professor Harold Rugg has performed research on imagination and the creative act and has found four "steps in the cycle of an artist's work."^6 He arrived at his theory after intensive study of works of art and the biographies of "some two hundred painters, sculptors, writers, critics."^7 First there is a period when the artist acquaints himself with the problem set before him. It is a "preparatory conscious period of baffled struggle."^8 The artist collects facts. It is similar to an architect considering the functional problems before establishing space, form, or structure.

Secondly, the person leaves the problem to the workings of the unconscious compartment of his mind. He fully expects the flash of insight to come to him. He is fully relaxed and there is even a contemplative atmosphere about the artist, but he does not struggle. There would probably be the use of some stimulant or a particular environment (cigarettes, a walk in a familiar countryside). Next the creative flash comes "with such certitude that a logical statement of it can be immediately prepared...."^9 Last,
there is a "period of verification, critical testing, and reconstruction."  

These are compared to the child and his creative act: the first period for the child would be one of intensified perception. The creative act for him is an expression of what the child sees and feels. There must be something in the mind of the child to be said before he can express it. If he is helped to continually see new things, or to see old things in a new light, or if the unusual is available to experience, he will be helped in the first stage—perception. It may take place in visiting new sights, or the craft may precede the perception:

In guiding the children towards this awareness of their surroundings, the practice of art plays a great part. To begin on a purely practical level, the attempt to reproduce any well-known object has the effect of making the child look closer, of training the 'seeing eye'.

The period of relaxed contemplation is not recognized in children, because ordinarily they do not like the thought of relaxing unless they are very tired or extremely engrossed. Their moments of inspiration are more like agitation. Their bubbling imagination happens with less effort than it takes to hold the urge back. The use of curious stimulants and an appropriate environment would be a further urge to what is ready to come out. If the perceptual experience has been profound, they will ask for an opportunity to express themselves.

The last period is a period of craft. The child must
be disciplined by a medium in order to symbolize his expression. He is channeled by a crayon in a hand that will not go where the little mind would like for it to go, the legs that will not leap as high as the jump should be, the mouth that cannot sing Christmas without lisping. Here the child learns by doing, by practicing, by developing.

It is the effect of this intensified perception, the inspecting, the looking, the wonder, the delight; the exercise of the imaginative workings; the experience of developing his manuability that is valuable to the child. It is not the object produced which is most significant, although the work is a reminder of an accomplishment and a prized possession. The act of creation is a stepping block to the solution of problems he will face later in life. We should not try to produce beautiful paintings or splendid drama for a testimony of the enrichment we are providing in the child's life. Our aim should be the provision of the opportunity for a child to grow and to find out about himself and other children and the natural world which sustains him. The works of fine art will inevitably appear, but without anxious coaxing on our part. Not all these creative children will become artists. But:

Art education introduced in the early years of childhood may well be the difference between a flexible, creative human being and one who, in spite of all learning, will not be able to apply it and will remain an individual who lacks inner resources and has difficulty in his relationship to the environment. Because perceiving,
thinking, and feeling are equally stressed in any creative process, art may well be the necessary balance for the child's intellect and his emotions.\textsuperscript{12}

Creativity is "the essence of the child's world."\textsuperscript{13} But it can be directed into unworthy paths: pranks and general mischief. At times the attitude of rebellion against authority becomes foremost in their minds, and the attitude of a group of children can truly spread like an infection. It does take a creative mind to work out the details of tying the door knobs of houses facing each other across a street for the pleasure of watching the battle that goes on between the adult neighbors trying to open the door against stubborn pressure. It takes some skill to know how tight the toilet paper has be across a road to make it look like a solid barrier in the darkness. There need to be directives other than applying all imagination to getting revenge from the old cross patch down the street. Perception needs to be more profitable than experiencing what happens when a drain pipe is stuffed with a rag and then set afire or when the uncongenial teacher reacts to a live rabbit in her desk drawer. Orderly creativity should replace disorderly creativity. The child's imagination can be extremely volatile.

The child's creativity should also be freed from the inhibitions of coloring books, television, and comic books. All these can probably provide an element of learning, but they tend to be complete within themselves without
allowing the child to assimilate knowledge with any fulfill-
ing reaction. They are shallow and mechanical. With their insipid entertainment they dull his perception. They seldom have his best interests for a guide.

The coloring book, particularly, gives the child a preconceived notion about how drawing should look. He loses confidence in the appearance of his own work, and confidence is most important to the child. It is one of his few holds on independence and pride. He should be given a certainty of value in his own spontaneous expression. When that is the child's attitude, he is free to create.

It's the squashing, squelching and silencing of youthful spontaneity that dulls and chills sensitivities and sensibilities. Conversely, it is only as we cultivate these fragmentary glimmerings of expanding and exploding thought that we firm the child's creative force into a dynamically functioning reservoir of power.

If a sense of beauty is to be instilled in the child, if he is to experience the aesthetic emotion, it will mainly come from his environment and training. His tendency will be to find elementary satisfaction in this emotion in glitter, primary color, vigorous rhythm, and cartoons. It should be part of the child's perception to have an opportunity to see fine paintings and hear poetry and music by accomplished artists. This is not to show the child's inadequacies but to give him a sense of what a masterpiece is. "Just what any individual considers
beauty or music or art is a matter of education....From the enjoyment of the crude and elemental, the child must be raised to enjoyment of the artistic and complex."

An architecture for children would have in its program the provision for exhibitions of work, both by adult masters and the children themselves. It would display the work of masters to give the child inspiration and to help him realize a sense of the aesthetic. It would display the work of the children to give the children confidence in their own creation. There would be provisions for guests to perform live drama, music, and dance. There would be provisions for recorded performances: records and films. If the creativity of the child is to be channeled in self-fulfilling directions, there would be provisions for the child to practice a craft or a skill in reproducing his experiences and perceptions in reality.

The visual arts, including all drawing, painting, printing, collage, tapestry making, and sculpture (modeling, casting, soldering, carving, welding) would allow the child his choice of materials to express the intensified penetration of new sights and original images from his own spirit. The world of drama would provide an outlet for an already inherent capacity for aping, miming, and emulating; it would provide him with a legal mask for his role-assuming tendency. Creative drama would allow the child's spontaneity to become the playwright,
and his own imagination the drama director. The world
of music would give him a touch of the minds of the musi-
cical masters. It would provide a group of children with
inspiration for new insights from the sensation and stim-
ulation of sound, where they would have the freedom and
space for a burst of dance as the music directed them.
The child could learn a skill wherein he might recreate
for himself the sound of music.

The architecture itself should be a contribution to
the awaking feeling for the aesthetic emotion. It should
have the same sense of justified spontaneity that we try
to instill in the child to give him more concrete confi-
dence in his own spontaneity. Architecture is one of the
arts holding as high a position as painting, sculpture,
music, or drama; it is a craft in itself. "The craftsman
is the maker...and the art of that craftsman is in the
poetry of his expression."16

An architecture for creative children would provide
a shelter to free the child from inhibiting censors. It
would encourage feeling as well as thinking—feeling in
place of analyzing. It would provide the proper setting
for craft-learning, and skill developing: an atmosphere
which encourages individual expression of the working of
individual minds. It would be a stimulant, a directive,
and a container. It would be a work of creativity, itself;
it would be conceived in the imagination of the architect.
It would be his expression: the work of an unconscious mind which has been filled with both a broad and a minute picture of the world of the child, and then has been left free to perform its own alchemy.
NOTES: CREATIVITY


2de la Mare, Walter, Early One Morning in the Spring. London: Faber & Faber Limited, 1949, p. 132.


6Rugg, op. cit., p. 5.

7Ibid., p. xiii.

8Ibid., p. 6.

9Ibid., p. 6.

10Ibid., p. 6.


14Ibid., p. 17.


16Kahn.
ENVIRONMENT

We can escape the influence of what surrounds us only by ignoring it, or by imagining that we are elsewhere. More often we are moved, controlled, directed, and caught up by the surroundings. The sun can help brighten our attitude, and a cloudy sky can dim it. The unusual usually surprises and delights us; the usual tends to bore us. The physical environment allows the movement of people; it controls the meeting of people, and the emotion of people when they meet. It determines the nature of the mood where people walk and work and play and recreate and create and learn. It can hamper or help the natural social processes. A family cannot find unity in a home that is spread over the landscape, or up through the air, where every member has his own apartment but no place for a get-together. Lovers find little real romance in a concrete and asphalt jungle. Students and professors will not get together and talk and learn if there is no convenient, appropriate place to do it. Children cannot experience fantasy if their world has lost all sense of capriciousness. Workers will not enjoy their coffee break if they can get coffee only in a dirty, crowded place. Couples will not enjoy a meal in a restaurant if the place is common, ordinary, unromantic, and brightly lit; they might as well eat at the familiar home. The physical setting is a backdrop for the people; it is their
container. It is the prime initiator for social contagion because it is always present: it is there when we are coming; it is there when we arrive; it directs and influences us while we are there; it is there when we are going; it is there after we are gone.

"Whatever the environment of the child he will find some part of it to which he will attach himself with special affection."¹ In the dullest environment the child can make-believe that magic and mystery exist. Even deprived children in slums seem to transcend the reality with unique means. But the impression of struggling to achieve this is present. At some time reality, practicality, and responsibility are thrust upon the individual and the simplicity and freedom which were his as an innocent child are lost. Pure make-believe at times becomes an effort of detachment for the adult; for the child it is spontaneous; for the adult it is whimsy; for the child it is necessary and ubiquitous. In time the child loses his ability to make much out of his drab reality. There is surely an ideal environment for children, even though they can make any place over with their imagination. It is important to find this environment, one that emphasizes what they are able to see, one that is worthy of their affection. Immediately, this search architecturally involves space, scale, and form.

Space is understood at different stages as the child
matures. The first relationship is one of proximity; it is the factor of organization which is most important in the perception of an infant. As the child grows older the relationship alters. He is able to see relationships between objects which are farther and farther apart. Separation is another elementary relationship. "The more analytic perception becomes, the more marked is the relation of separation...."2 The important thing is that the young child can discern between things close and things separate if the relationship is obvious.

Another stage is a recognition of order or succession. An example of this is symmetry, the most elementary order. The body is symmetrical and the child can easily make an association between the order of his own body and the symmetry of form or space. This order of perfect balance would be primary in architecture for children.

There is also the recognition of enclosure. He does not necessarily prefer one degree of enclosure to another, but he understands the significance of each. He can feel the freedom that unrestricted space allows; he can sense the security of a secluded enclosure. He will both look for a vacant lot to spend his energy running and for a cave which surrounds him with bramble or rock. Both would be present in architecture for children: freedom for roaming and the sheltering privacy of a sanctuary.

In all cases of spatial perception, the child under-
stands the most obvious and elementary of relationships, and as his perception develops he understands greater complexities and subtleties.

There is a strong sense of the distinction between areas in the child. There can be very little division, only the hint of a physical boundary; even a change in color or texture would be enough to make the area take on a remarkable significance. An area has its own personality, its own "powers or mysteries". Next to our house there was a windmill tower. At the counter level of my four foot height there was a horizontal bracing. It was perfect for the counter of an imaginary general store. I lined up old cans and assorted items to sell. Except for the timber structure, it was completely open, but it was always my store, well defined from the areas around it. If children so wish they may make the enclosure by their minds if it is not where they need it.

Although the child can tell when things are his size, he does not have a keen perception of scale. Obviously, if his feet cannot touch the floor, the chair is too large. But all children's drawings will show that their scale is conditioned by what is important to them, and their pictures appear distorted when compared to conventional scale. The eminent things are the largest in their reproductions: the head is large for the body; if the subject is doing something with his hands, they are the most
prominent. The size of actual space is unknown. He cannot estimate dimensions. He cannot tell if he can go through a door until he goes through it. "It is only by walking, touching, counting and measuring dimensions that we learn to estimate them..."\(^4\) Gwen Raverat remembers an experience where as a child she imagined that large tigers lived above the canopies over beds. The space simply was not large enough for tigers, she later realized.\(^5\)

The child grows up in an adult sized world. Spatial scale reduced for him would be another adjustment. At times there would be adults present in the children's architecture, so space should be able to accommodate them. Of course there is a limit to scale. An architecture for children would oppose a trend in which scale today is not related to the human proportion at all. On the other hand, miniature buildings, four-fifths of usual buildings, would not be suitable. For the most part, the problem of scale should be limited to satisfying physical needs of the children: furniture, the height of door knobs, window operators, and light switches.

Number-size is important, however. An environment for several hundred children is not an environment for children at all; it is chaos. They all struggle to be seen and heard in the crowd, and mad, mass discipline is the most sought-after solution by teachers. And "...the necessary aggregation of children into schools for several
hundreds at a time destroys any notion of communion with
nature."\(^6\)

The number five has an importance to children. Their
hands have five fingers, and young counters have their
first examples on their hands. Primitive man learned to
count by using his fingers, too. "'Five' is the same word
as 'hand' in the language of Labrador, of Siam, of Tibet,
and indeed in the speech of savage peoples all over the
world."\(^7\) In most languages, when the person counts aloud,
he pauses at the intervals of five, ten, etc. When a
relationship of numbers of items occur in designing for
children (as in the geometric divisions of a circle), this
knowledge about the number five should help to direct the
solution. They would then have the opportunity of assoc-
iating the number with their own experience.

The young child prefers curves to straight lines, not
for any prenatal, biological, maternal significance, but
because it is the simplest of geometrical properties.
Rectilinear shapes have corners and angles. At first the
only difference the infant notices between shapes is whether
they are closed or open forms. The next step is to discern
the curved from the straight, but only because there is a
conjunction of lines, making a corner. Although the six
or seven-year-old child can well understand the Euclidean
shapes, it seems more likely that curves would be the best
forms for children. (Sybil Marshall found through experi-
ence that her students in art often preferred the circle for a shape in which to compose a drawing, over a square or a rectangle.) Moreover, the curvilinear form has a more obvious capacity to induce an emotional, mystical, and organic spirit. It conforms best to human movement, and it is more of the family of the forms of Nature and therefore best suited for an idyllic setting.

Because the child so easily makes associations, it might seem that the most conventional, adult-centered world would be sufficient for his peculiar architecture. But it must be remembered that the child all too soon loses much of this ability when the cultural influences become so mechanical, factual, and repetitious. In his own architecture he should be given the opportunity to exercise his imaginative and associative powers, and in the same way which develops his body, his imagination would learn and develop and grow by exercise, by use. Our strength and agility are lost with misuse; would it not be the same for the imagination?

...children need many pinches on which to grow—objective pinches of greatness—things to thrill them—things to broaden their inner and outer vision—things to give them new insights into an old, old world—things to give them room for added growth. Things? What things? Who knows really, for, as the poet observed, 'the world is so full of a number of things.'

A list of these "things" which delight children would never be finished, but the following is an attempt: a draw bridge, a sand castle, a winding stair, hummingbirds, bells
tortoises, "swift-peedy pebbled water"\textsuperscript{9}, a footbridge, a tunnel, a cave, a tree house, a big bug, a sea shell, a spider web, a tree heavy with fruit, an unguarded watermelon field, a junk yard, "a long window full of geraniums, steep wooden staircase(s) with a latched door that clicked loudly,"\textsuperscript{10} a gourd vine, "Swinging straps and flickering sheels, bright chains...dusty machines...step-ladder and horny ropes,"\textsuperscript{11} a peep hole, a crystal, a hollow tree, fairy rings in the grass, fireworks, gold fish, a water-spool from which to sneak a drink, a pond where you swish your feet, a waterfall that you can see from behind, a jack-o-lantern, a rainbow, a princess, a white charger, candlelight, a gargoyle, a gazebo, a tower, a dungeon, a wishing well, a plastic ring, a swing, a string, a rhyme, a song, a hiding place, colored glass, a play-house-size box, a Christmas tree, and unopened packages. These and more are subjects for metaphor-making. Some of these things will be found in nature; some will be cultivated. Some help the children to emulate their parents. Some are pure fantasy.

Some are a result of the movement a child makes. Watch a child walk, notice how seldom he just walks and how often he skips, slides, runs, hops, and spins. He does not move conventionally; neither should circulation in his architecture be conventional. Every entrance should be a little intricate and troublesome. Every staircase
should wind mysteriously. The pattern of the floor where they circulate is significant. They will follow a directed pattern for the same reason that stepping on a crack breaks your mother's back.

Some say that dramatic form repels children psychologically; the unconventional would frighten them and make them unstable. But notice how frightened a boy is on a weak tree limb; the odds are in favour of him being anxious to climb higher, exhilarated by the danger, and proud when he has a wound to flaunt. Try to keep him away from a cave. Stop a young adventurer from riding a horse too fast. Try to convince a child not to watch a monster movie. The unusual is good for the child; no, it is necessary so that he will not have to become accustomed to condescending to dullness; he should not have to be an occupant of a pigeon-hole when he should be flying in the open air of his imagination; he will not grow up without an adventure. Fear of the dramatic is taught by hum-drum parents who are afraid of being social deviants. Rousseau recommended that children be given a colder and colder bath until the water is icy, to develop them into Spartans who would be more able to take physical discomfort and to be more immune to disease. It applies to architecture. Expand the child from the ordinary and he will not grow up contented to be stereotyped.

An architecture for children, then, would develop
space by obvious relationships: forms would be clearly separated, symmetry would be used proudly, and the child would have his choice of running space or sheltering confines. There would be areas with specific designations and areas subtly divided for the individual child to make his own designations; there would be upstairs and cellars for the child to give a significance of tower, dungeon, or whatever the child pleases.

Scale would not be necessarily proportioned to the four-foot high figure, but it would be reasonable. Furnishings would be made to fit his physical needs. Programmatic population would be reasonable limited. Groups would not exceed fifteen to twenty children.

Forms would have an origin on the preference for simple curves or plastic shapes. All forms, however, would have as a prerequisite the contribution of a spirit of fantasy and an association with the family of Nature.

An architecture for children would be filled with elements or "things" which delight and provoke them, which are given life through their imagination, their tendency for anthropomorphism. It would reflect the unconventional at every opportunity, a reflection of the child himself, who begins life expecting to make the world and all its mystery, delight, and happiness his own.
NOTES: ENVIRONMENT


11. Ibid., p. 48.
OBSERVATIONS

A Montessori School

The school was typical builder's boxy, with an imitation belfry sitting on the gable ridge. It was too small to hold a ringing bell, but it must have said "schoolhouse" to people who read that type of language. The "style" was completed with red brick, white shutters, and a non-enclosing picket fence.

The day was gray and wet. A tardy scholar, with a bright yellow rain coat and only one galosh, waited after ringing the door bell. His rain coat had his name sewn in black letters.

Through the door there was a long, wide corridor where probable a hundred yellow rain coats with black lettering hung. We had been let in by the secretary and the door was latched behind us. The scholar was not concerned that he was late or that he had lost a rubber boot or that the door was locked above his reach. He and I stood waiting to be told what we might do.

We were both sent to a classroom. In mine, I learned that the children are not told what they were to do, such as, "Titus, get in your place!" Teachers spoke in whispers: "Titus may get back in his place," as if it were, "Titus may have a new ball bat." Whispering makes children attentive.

The classroom had a conventional geometry and windows
which punched holes in the walls. Around the room were low shelves filled with the educational materials. The floors were hard surfaced for a purpose: the child would become aware of scraping a chair across the floor if the noise was loud. On the walls were pictures drawn by the children. Placed on the shelves were small potted plants and a bird cage. In two U-shaped arrangements were the chairs and tables where the children worked. The three adults were tremendous in scale, the children seemed to fit. The ceiling height had little effect, I feel; the shelves, tables and chairs did.

There were 23 three and four-year-olds. They were beginners at Montessori; they had been in training there for about two and a half months. They were all wearing red apron-bibs which made everyone the same kind. But the reds were not the same and the kinds of white lettering which spelled their names were different. Their mothers had made the bibs, and this gave everyone individuality.

Although the room was half-way divided by a closet, the children were gathering in a circle in the center. The room had no provision for this type of activity, neither by spatial provision, flexibility, nor area division.

Before the children could come to the circle, they had to be recognized as being "ready" to come. This meant
that they were seated in their chairs with their hands folded in their laps and their feet flat on the floor. The act of recognition was a whisper from the teacher: "Johnnie may sit next to Titus." The children, always squirming and twisting and looking questioningly at me, the stranger, were never louder than the whisper of the sweetly smiling teacher.

Her manner had a stage quality of unreality. Perhaps the dramatics were to hold the attention of the children, or to place both teacher and pupil on the same level. The kindergarten smile-and-chatter is probably just as inevitable as baby talk to an infant.

She showed them a picture which a child had drawn of a tree with five squirrels in it. "Two of the squirrels have fallen off so that leaves three," she said sweetly. Then she taught them a song about five squirrels sitting in the tree. Five is a very important number in songs because of their fingers; with five characters, each finger has a part to play, and there is a handful of understudies.

In the song, a hunter came and fired his gun and away they all did run. One little boy realized what had happened to the other two squirrels in the picture. They were clumsy and they ran too fast and they fell off the tree and got shot. This is free association.

After the song, the teacher demonstrated the use of
a dust pan. With exact choreography, it seemed, she swept up some oat meal and emptied it in the waste basket. Then two chosen pupils, in turn, imitated the task. The precision had a place. This was a demonstration of the materials which are the keys to the Montessori method. Later each child chose a different "material" with which to "work". They did not play with these materials; they did not experiment, either; they repeated what the teacher had previously demonstrated. It just looked like play.

Each group of materials were kept in separate baskets. There were sets of blocks, drawing materials, pitchers with glasses, rugs, brooms, and picture plaques. Each child went his own way, settled his own conflicts with another child's selfishness, and became curious about a subject. If he found something that he would like to know, he would ask the teacher to give him a lesson, and in this way he began his education. One boy had learned the parts of a flower because he had become interested in each part which was differently colored on some picture plaques.

Although there were plenty of windows, they were spaced so that I was completely unaware of the out-of-doors. I do not remember a child looking through the windows. I felt that if nature could have been enjoyed first hand on even a rainy day, it would have been to an educational advantage.
In the second classroom there were 23 other, more advanced children. They were completely oblivious to my presence. Whereas the other children had asked why I was there; these, if anything, were annoyed at my interference. They were completely occupied with their lessons and the society in which they were. There was one boy, however, who came to me because I was another adult-symbol of knowledge (because I was large) and asked me how to spell "cat". How surprised I was to find that my answer was the wrong one. They do not spell for the children using the alphabet like I had learned; they say the word over and over, very, very slowly.

In the other classroom, two visiting nuns were the center of interest. One child was fascinated by the thought that they were called sisters. She knew that they were obviously sisters to each other because they wore the same costume. In the latter classroom, one child expressed a quite different attitude toward these extremely novel visitors: "I believe that we have had something like this before."

One of the children in the more advanced group had been writing numbers in sequence for several weeks; he was up to 1285. He was four or five-years-old. There was no sense of play here. These children were seriously involved. The contrast between the two classrooms showed what the method can do. A room full of 23 lively but
quiet children who had been there only two and a half months is very impressive.

It is a wonderful thing when children are helped to learn, at their pace something that they are interested in learning. The process makes them self-disciplined and then provides materials to get them interested in a profitable subject. They advance very rapidly. However, I wonder if the order or the subject matter imposed upon them is the best. The knowledge seems very systematic and mechanical, rather than a method of self-expression. At this age, children are usually learning about themselves and need to express what they learn.

The building does not help as much as a building could. The directresses know this and they want something better. The pseudo-traditional character does not reflect the educational philosophy, nor does it adequately fulfill its functional requirements. It is a place where creative learning occurs and yet it is imitative; functionally, the school demands flexibility and the building does not provide this. A progressive educational method deserves a satisfying, progressive architecture. The building is far too common and real. The method is exactly the opposite.
The Craft Shop Art Class

Every Saturday children are sent to this craft shop to expend their creative energy and to be occupied, freeing their mothers. They are brought back with marvels that they have made, and it satisfies the parents who send them. But these are only the people who have no idea what creativity or art means to the child or to any one. These words, creativity and art, are thrown around loosely, in a heretical manner, with no thought of abuse.

In the back of the shop there is a big storage room with enough space cleared for a few tables and a refrigerator full of soft drinks for "breaks". From the front of the store the children bring back a craft kit to assemble. As they pass the proprietor, he charges the cost to their account. There are several types of kits: glass-staining kits, copper and glass flowers which sit in plastic pots, plaques where the children squeeze clay as their intuition directs them which becomes something "abstract" for an uncle who is "way out", all kinds of clay objects to be glazed, such as miniature Buddhas which one little girl was painting pink and blue, and many other things in the same category.

Most of the children were little girls. They sat around discussing their families, their family's status, their family's status symbols, and the personality of each other, until the proprietor's mother or the maid showed
them what to do next.

Two very pretty girls were very close friends; they did everything alike: the projects which they made, the colors which they painted them, the other girls whom they liked or disliked, their stretch pants and fuzzy sweaters, their ideas, their movements—all were the same. They were a very tight and small clique; they tried to pay no attention to any one else, and one little girl tried very hard to be noticed by them.

The proprietor's mother was a small and fierce woman who was only patient and sweet with the girls when they arrived, before they made a mistake, spilled some glaze, or tried something unconventional. After such a time, the girls trembled from her castigation. She was kept very busy, almost frantic. There were so many children there and they all had different projects, (except for the two mentioned above). She was kept running back and forth from the refrigerator to the cabinet to the table where the glaze was spilled to the child who had applied a second coat before the first was dried. She could not keep straight in her mind which project belonged to which girl, whether they had taken home last week's project, or whether the project had been fired in the kiln (which was nowhere to be seen: the children had no idea of the ceramics process except for the bits of color they applied to already cast forms), or whether they had paid for last month's
crafts. In short, she was not well organized.

The environment was the most suitable thing about the arrangement because the children could work without any fear of ruining the floor or the tables. Everything was old and used. There was a freedom from order and cleanliness, and in this respect, the atmosphere was conducive to creative activity. I did realize a need for places to hang children's coats and the need for storage, not only for materials but for past projects.

The children were left free to do as they pleased; there was no need to do any thinking, planning, or imagining. The only choice they had to make was what their next kit was to be, what color they were to paint it, and to whom they were to give it as a present. It was simulated creativity, designed to fill a Saturday morning when Mother wanted to go shopping, and to sell kits which could not be assembled at home where there was no kiln. Children in a place like this are typically part of a materialistic, exterior-oriented society, bent on the attainment of status on the part of the parents, and merely money on the part of the proprietor and his mother. They deal in instant craft and sure success. No one there seemed to mind that the children were not using the opportunity to make something with their own hands to express something out of their own perceptions and imaginings. They were killing time in an expensive way.
In December I visited two English children. Their parents were on a trip and they were being watched by their aunt. William was ill, and that and his being orphaned joined to make him less pleasant than he would have been otherwise. It made him more determined to have his own way, no matter how extreme the demands were. But it also helped me to see how easily children can be distracted from previous thoughts and feelings.

I started badly when I sat in William's chair. Logically his aunt and I both knew that it was not good to coddle him all the time, so I remained seated. When the aunt came back after a brief time in another room she found William and me friendly and William in his chair.

His first game came from his coughing. The natural pressure that came through his lips was motivation for a new sound: pbp bp bp bp bp, like a horse when he sighs, a raspberry. The game snowballed into a long series of provoked coughing.

They were stringing dyed spaghetti to make beads. William was intent with this production. Whenever the spaghetti dropped, it hit with a boing-boing sound (which William supplied). His goal was to have a full string of beads. Disaster fell when I was tying the knot at the end of the string and fumbled the string, losing half the spaghetti. I was castigated properly but reprieved myself
after restringing the beads.

Inigo was preoccupied with his beading also, even though he could not manage his hands to put them on the string. No amount of coaxing could change his attention until he had forgotten about them. He must have been fascinated by their color; they moved so easily on the slick tabletop, and they spun so brilliantly; but they fell off the table, too. He conned me into picking them up by demonstrating how hard it was for him to get out of the chair: a grimace, a grunt, and a look of plea. It succeeded. The next time he dropped some, he forgot that game and got them himself. He sang and chattered constantly, and when his imagination failed to give him something to utter, he imitated our talking. William was quiet and concentrated until a new sound or idea came into his head.

The game changed when William discovered some modeling clay. He said, "Make me a...a...a... tank!" Where did he learn about tanks? Television? The boys at his nursery school? The only form that I could mold to resemble a tank was a block with a small, cylindrical nob on top with a stick for a gun. William thought that this was a good sport, so he added three more guns to each. The five tanks ended as decorations for the Christmas tree.

Inigo liked a game of being helped into a chair. He had well shown that he could not do it by himself. As soon as he was lifted into the chair, he would slip out
some opening, and then ask to be put back in it. Of course it was a cycle.

William had forgotten about his orange juice until Inigo found it and took a swallow. William was not generous.

William turned over some chairs—to make a house, he said. The structure did not faintly resemble a house, except that there was a new-found space, which delighted Inigo as he ran around and through it. It was a house to William.

A matter of spraying snow on the Christmas tree was a job only for William until he found that I could push the atomiser button better than he. He consented to my help.

Inigo and I discovered another new game. He crawled up beside me on the sofa and I flew him across to the other side of me, and then he plopped down to the floor—another cycle which delighted him. William was jealous of this new delight, so I had to fly him across, also. He is so much heavier that I could not fly him so high, and it was not so much a thrill as it was for light Inigo. But he got his attention, and he laughed just as loudly.

Then we read a book about vehicles. William had read it many times because he could say all the pages as I read them. Inigo was more delighted by the sounds: r-r-r-r, whirrrrrrrr, roooooooar, zoom!

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As I was leaving they realized that their distraction was going, and they remembered that their parents were gone and that William was sick. Poor Aunt Allyson was left to find more distractions for the orphans.
At this school I was to go from grade to grade, making observations of different age levels. My day began with the kindergarten. The kindergarten was located at the end of a string of rooms connected by an exterior corridor. The main room was large and full of light even on a gray, rainy day. There were windows all around the room and shades on all the windows; the only windows unshaded were above the cabinet at such a level that the children could see outside but an adult had to bend. Chairs were around the edge of the room facing the center. On these the children sat reading books. "Fairies aren't all that little," said one boy, making an observation from a picture in another's book.

There was a place for coats, a sink, tables with toy dishes, and a rest room for each sex. The rest rooms had doors so heavy that they frightened the children when they were shut, so they used the main rest room in the school. The teacher found from experience that small, dead-end spaces were unsatisfactory; she had to have the storage unit moved away from the wall to allow one way traffic to pass.

We said the pledge to the flag, sang "America the Beautiful" and said "The Lord's Prayer". (I wondered if anyone's freedom had been violated.) There was no Montes-
sori sweet talk here: "All right, now the "Star Spangled Banner", kids," and her healthy voice resounded.

The teacher then gave an art lesson. "The other day someone turned in a drawing of a little girl that looked like a nursery school girl." She showed them how it looked by drawing a stick figure on the blackboard. "What would make her look more like a little girl? Make her rounder!" Then she drew a more rounded stick figure with a triangular skirt and a handful of round flowers, held by rounded fingers. "Doesn't that look better?" she said.

Art for this teacher was another system to be learned, something to be mastered by the few who would become artists, for the rest a method for developing manuability, and not at all a means of expression for these imaginative minds who knew so much about fairies. The situation was improved when she had them draw, squatting on the warm, wooden floor. They spread out naturally in positions that only children are able to assume and went to work. There were heads barely inches from the paper; there were feet spread out in every direction, even up in the air; there were chins resting on knees and elbows on crossed legs. They were at home on the floor. They were drawing themselves, practicing to draw themselves flying a kite. On the next day they would draw the kite.

When they finished, they criticized each other's draw-
ings. It was not long before they found out what the teacher wanted to find that they had drawn; deviations from this were considered mistakes. Some were criticized for having a head too large, no hair, no arms, or being too small. Some had remembered a kite being mentioned, and they included that and a sky with clouds and a sun, but that was something for which the teacher had not asked. I had thought that all these were the characteristics of children's drawings: distorted proportions, missing and unimportant limbs, and a sun that was as inevitable as the signature of the young person. The least criticized drawings looked most like the teacher's standard on the blackboard: the rounded girl with a triangular skirt and flowers. However, one little boy had unavoidably drawn himself with a triangular skirt and the criticism for that, surely, severely wounded his masculine pride. It was not his fault. He could not forget the prototype called to his attention on the blackboard, and he merely wanted to please the teacher.

"How can we help Susan's?" asked the teacher.

"She should have a rounder stomach," said a student.

Said the teacher, "Remember, our hands are not like flower petals."

One critic was stuck on the idea of including noses. He said, "But where's his nose? He can't smell nothin' without a nose;" and again: "Well I never seen a black
nose before."

After this period of helpless criticism, they sang a song about crows who flew around and flew around till the farmer came and he shot them and they all fell down, dramatically dead. This, I felt, in many interpretations, was the proper self expression.

In the second grade the children did look a little older, but the situation had been changed greatly. There was so much order. Each child had a desk in a certain row. They printed; they used compound words; they waited in line to see the teacher. In the reading group, they used much expression when they read aloud. If they missed an exclamation mark that was at the end of a sentence, they had to go back and use it, exclaiming as they re-read. No nonsense was tolerated here; no more sprawling around on the floor.

The severity of the reading period was relieved by a rhythm session in the auditorium. Since the rodeo was coming to town, they were learning square dances. This was a lot of fun for them. They got confused, made mistakes, and helped each other to learn the steps. There were not enough girls so four or five boys had to sit out a few times, taking turns. One of these sitting boys was carried away by the rhythm. He would clap with all his hands and arms and sway back and forth, moving his entire body, dancing as he sat on crossed legs. Everybody had a
good time. The teacher who had been so strict in the
classroom was smiling, beaming with pride as her students
exuberantly sang "Oh Johnnie Oh!".

The fourth grade was planning a program on space while
they waited on the music teacher to come. One boy had for-
gotten that he was to be the sun. More than likely, he
forgot so everyone would be reminded that the show was to
revolve around him.

The teacher asked, "What can we do for a sound effect
for rain? Listen to it outside." Here are some of the
suggestions: "Maybe it sounds like clapping." "We could
get a big tub full of water and a little bucket, and..."
"Use a tape recorder." "Maybe it will rain that night and
we can just open the windows!" The teacher then suggested
that they try something at home and have proof that some¬
thing would work before they offered it as a suggestion.

The music teacher gave the music lesson. She tuned
them all, thoroughly, to the pitch pipe. Then, they began
singing untuned. The songs they sang seemed silly, and I
know, that the students agreed. To instill rhythm, they
accented a beat with a punch; they were more amused by
being allowed to punch each other than by learning to feel
a beat. The teacher lost control. She resorted to wood
blocks, two pitches. She started hitting one, in time,
and asked what she was doing. The pupils were supposed
to recognize that she was speeding up, but they reported
all her other actions first, from hitting a wooden block to frowning. If anyone "goofed-off, they goofed-out", she said. This meant that if they failed to follow orders, they could no longer take part in the music lesson. This was such a tempting invitation.

In the sixth grade, the class was divided into two parts: one group faced away from the windows and the other group faced the blackboard. The teacher said that the first group was a group of her better students, and the other group just played around. This method of seating separated the sheep from the goats. She said that it was good. I wonder.

There was a geography lesson there. Their assignment was on the board in a series of questions which they were to answer after they had read the material, but they read the material only where they could find answers to the questions when their neighbor had not already found the answer.

These students were quite grown-up in appearance. They were masters at plenty of things: knowing who would work and find the answers for those who were having a better time making jokes with signs, expressions, and giggles. They were very self-conscious and avoided being drawn by me by hiding their faces and whispering and giggling. They had mastered the teacher. At times she talked, but facing straight ahead, almost afraid to look to the left or to
the right, wanting to be unaware of what was going on.
The music teacher, Mrs. B., whom I was to follow for this day, dressed like a witch last Halloween simply for the pleasure of her pupils. She had worn black clothing, with long-nailed fingers, a long, mangy, ratted wig, spidery eyelashes, iridescent eyes, and a ghoulish complexion. After hearing about this, I had every reason to expect an unusual teacher. I found one.

This school day started with a ukulele band practice before classes began. She and a helper had about fifty uke players and ten guitarists. They sang and played "Beautiful Texas", "Dixie", "The Eyes of Texas", and "This Land is My Land", all songs familiar and simple enough to play on these instruments. The group grew every week. The new ones were helped to learn basic chords on an afternoon after school.

Our first class was a kindergarten. She walked into the class carrying nothing, sat down at the piano, and charmed the children with their own singing. If she had had music to read to accompany them she would not have used it; she faced the children and they watched her.

She had learned that their older brothers and sisters could teach the younger children songs which they had learned. It was not important for the kindergarten children to understand all the words. She had taught them a
song where they counted in Spanish. The children were not fully aware that it was a foreign language; she asked them how the song was different—they had to guess. They sang for the pleasure of rhythm and rhyme and melody. The songs which they sang loudest were "Oh What a Beautiful Morning" and "We're Marching to Pretoria": songs conventionally thought unusual for these children to sing.

The last song was about bears who did different things described by the piano. Finally, the bears went into hibernation, and that is how Mrs. B. left them: hibernating—asleep, silent, and still until their regular teacher came back. She said that in the springtime they froze like snow-cones.

The next classes were sixth grades which were located in temporary buildings. We went out there carrying an auto harp, which Mrs. B. played (it replaced pitch pipes), maracas, a tambourine, bongos, and a steer horn gilded at the two ends with striations in the middle across which a forked, wire instrument scratched a sound. These were the rhythm instruments which the students played to accompany themselves as they sang. The enthusiasm for learning to play them and for the songs which they sang was evident. The effect was not always professional, but it was often very pretty. On some songs, the auto harp accompanied them, on some a guitarist from the early morning session shined, and for some songs the ukes were brought out to accompany.
They sang "Mi Caballo Blanco", "Chiapanecas", in English and Spanish, and "Washington Square", a song made popular last summer. They sang in two and three part harmony. In one classroom where she had a few difficult students, they sang a song which had a verse for which a student could make up new words. It was called "You Can't Get to Heaven".

These were songs which the students would remember and would want to sing at any time they felt like singing. The teacher made a musical connection between the world of the student and the extra-curricular world of the adolescent. It was a worthy compromise. These pupils enjoyed their music lesson; it was not silly; they will not soon forget what they had learned.

In the fourth grades, she taught them Calypson. She would begin by playing the rhythm and chords on the auto harp. To those who had the rhythm instruments, she would say, "Listen to the rhythm and when you understand it, join in with a fitting rhythm of your own." She stressed that they should not try to do what someone else was doing. When all the instruments were playing, they began singing. She provided both a framework and a freedom for individual expression. It made the music more personal. Some ukes and guitars accompanied "Dixie" for a finale.

Third graders sang about animals: pollito, perrito, gatito, burrito, patito, and chantito. Each animal had a
sound effect accompanied by a certain rhythm instrument. The sound had to come in at a certain time. The children had to concentrate in order to play them at the right time. She taught them a new song, "Sur la Pont d'Avignon".

After visiting a fifth grade which sang the same songs as the sixth grade with more enthusiasm and possible less polish, we went to another kindergarten. Again, there were forty or fifty five-year-olds enchanted with singing. She had no helpers and she needed none. They followed her directions in the same way as the other class had done. It was perfect until one bear at the last in a small voice said, "This bear isn't sleepy." The dam of authority and enchantment leaked for a moment.

After changing classrooms every half hour since 9:30, she had thirty minutes off at 2:00. She talked about music and children. She said that there were inevitably monotonous who could not sing a note on pitch, but it is not best to actively correct them. In time, they realize what they are doing wrong and correct themselves. It is more laziness than disability; it takes effort to sing on pitch.

She said a large chorus around fifty is a good size. The more there are the better the sound, because the poorer voices are covered and blended, and at the same time, the poorer voices have the opportunity to sing. Thirty is a good number for rhythm instrument groups, fifteen a good number for listening to recordings.
She said that she could work very well with mixed age groups. Levels of musical accomplishment and age do not always agree, and even the younger pupils who cannot understand what they are doing can imitate the older ones and learn from them.

As school dismissed, I left fairly tired. She went with the same lively joy to a meeting of her all-school chorus which met after school hours.
A Private School

On this visit a knowledgeable adult spoke to me about children and their environment. She was the head of the "lower" school. Her job was to oversee and research and examine. She saw the children from a unique viewpoint: neither that of a parent nor a teacher, but with keen interest and wide objectivity.

We went to a kindergarten. This part of the school had been converted from what used to be apartments for teachers. The walls were all a warm, bright, cream color. There were small windows everywhere which saw plenty of trees and grass. The spaces were small; it was like being at home for the children. The important difference was that the parents were not there. The children were freed from those loving authorities and their unavoidable restrictions and demands.

There was a room for music, a few rooms that functioned as classrooms but did not resemble the conventional classroom. They had a large table in the center around which the children sat; the tables nearly filled the small rooms. There was an intriguing upstairs room where the more curious and advanced pupils worked. There was a room for painting and drawing, with easels and paper and paints. There was a "little girl's" room full of miniature dish-sets and furniture and dolls. My guide told me about one boy whose father forbade him to play with feminine toys.
at home. When the boy first found that a miniature toll-top desk had dishes in it, he slammed it shut and said, "Boys do not play with these." Since that time he has been discovered playing the room, with the forbidden objects. The guide, Mrs. M., said that it was good for him to have this release; it completed him; he found a place to express a repressed desire. More boys than girls inhabit that feminine room.

The children know the purpose that each room has. Each day the child himself chooses what he is going to do by going to the room where that activity is. He goes upstairs on his own volition, prompted by his curiosity to learn more exacting things.

Mrs. M. showed me the children's drawings of the Salt Grass Trail or the rodeo in Houston. The pictures were all delightful and different. One child had turned her back on children's conventions and had drawn her horses from the front view. That child had seen a horse. One boy had explained why his background was completely orange. He said that the sun was setting. That child had seen a south Texas sunset. Another child must have been impressed by the fact that everyone says that it rains during the Trail. His picture had an upper border of gray clouds pouring their rain over the horses and wagons, and hiding a smiling sun. Each cloud had a face, some smiled, some frowned. This child also had made an observation and had
expressed it uniquely.

They all wore uniforms. For boys it was white shirts and ties; for girls it was red pinafores. They all looked very charming, but the boys looked uncomfortable. There are no more beautiful creatures than this group. I feel that there is never a homely child. Their eyes are so large and their heads almost too large for the delicate neck on which the heads pivot. Their hands are so stocky and yet so graceful.

Mrs. M. told me about the immature children who were very similar to aged schizophrenics. They need small rooms where there is not so much freedom; they are easily distracted, and mirrors keep them from watching other people.

She told me that stairs were good for children because it developed their co-ordination. Besides, children love stairs. She told me that groups of twenty were maximum for one teacher to work effectively. Fourteen is better.

She said that, ideally, a room should have no corners, because, among other things, a corner draws a shy, solitary child to it; it is a place to hide and to withdraw from the group. I believe, however, that a child should have this privilege.

She showed me the theater where the students present plays and musicals. The older students design and execute all the scenery. All students help throughout productions with ideas and suggestions.
She showed me the room for an activity which they used to call dancing but found that pantomime was a more descriptive word.

She told me about teaching machines such as the talking typewriter which would help the individual child to learn to read. Freed from the group and an instructor, he could push a key and hear what sound that letter indicated; he could spell a word and see how its picture appeared. A five-year-old could learn to read in a few weeks by using the machine half an hour a day. He would do it in a way that he would not be hampered by the influence of the group or the personality of the supervisor. The supervisor would merely control the program put into the machine.

Mrs. M. gave me reasons for what I had instinctively felt about a child's environment.
The Museum of Fine Arts School

The classroom that I visited at the museum was a renovated space. The walls were concrete block painted white; the high ceilings were exposed concrete joists painted white; the floor was unfinished concrete. There were variously shaped and sized storage cabinets painted bright red-orange.

There were two long, low tables, topped with paint-stained masonite; there were wooden folding chairs, adult-size, painted bright red-orange also. There was an old sink with a leaky drainboard. There were no windows.

On a wall there was a long panel on which hung the children's work from many different classes. There were tempera paintings (one in particular was some dark green, many-sized turtles, swimming in a light green sea). There were brilliant collages of simple objects, there was a giant, complex collage done by a group. This giant, complex collage was a park with the usual animals, ponds, and trees on a usual green field. But there was an unusual road used by a few cars (the cars Detroit produces should be so graceful); there were fifteen or twenty stop-signs along the road. The road gave the artists problems: it crossed over itself, and it did not lead anywhere; it just stopped with no place to go. What a strong and accurate statement of the curse of the automobile and all its

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directives: stop! stop! Stop! everywhere.

Mrs. G. showed me the children's drawings of the room where we were. She had prompted them to notice details and colors as they drew. Over half the drawings had one thing in common: the subtle white-on-white pattern of the walls and ceiling. All these bright cabinets and chairs, all the work on the panel, and all the people in the room were diminutive; at the bottoms of the pages. The walls and ceiling dominated the compositions. It impressed me that children are extremely conscious of what surrounds them. I wonder if no windows make a difference.

Mrs. G. took some clay pieces to another part of the museum to "pack" a kiln. She explained how to pack and to operate a kiln. She showed me a kiln fired-up, with the red-hot glow peeking through the upper air hole.

She prepared the paints for the class: red, yellow, blue, black, and white. The children drifted in: three boys, five years old. Tom, Michael, and a boy whose father also came to show Mrs. G. some of his son's work that he had done at home. The papa was proud; his son was performing and cocky.

When the father had gone, they went to work on their assignment, wearing backwards-shirt smocks, to paint a springtime garden. They began without hesitation, chattering, trying to act the comedian with their comments.

Tommy: "Ai! For Heaven's alive sakes! I spilled it
like a naughty boy."

Tommy saw that the other boy had put a sun in the upper right hand corner, and he did the same. The teacher reminded him that he was copying, and that they were not supposed to do that. When she next looked, there was a red mark across Tommy's sun.

Teacher: "What is the red cross?"

Tommy: "Oh, that's a little x."

Tommy's next picture began with an "x" across the entire page. He filled each quadrant with a different color. Naughty Tommy!

Then, I heard: "... or I'll clock ya in the stomach."

"Yah, what's clock mean? Tick, tock, tick, tock?"

"No, lick, lock, lick, lock!"

They each painted two pictures: a band of blue sky at the top, a narrow band of yellow-green grass at the bottom, and flowers, very large and very graphic, simple, bright, and fresh, in between the bands. Then they chose to do one each in crayon (their favorite medium, probably).

The hour was over, and they drifted out with the same unhampered freedom that brought them in—probably a little more cocky than when they arrived. I felt as if I had witnessed the transformation of two Jiminy crickets and a Cheshire cat into three Cheshire cats.
DEMONSTRATION

I propose that the park and recreation systems in metropolitan areas operate elaborate Creative Arts Centers for children from about the ages of five to eleven years. Such a Center would provide opportunities in various crafts, theater, music, and a library for children's books and references. The Center would be open when children have leisure time: after schools on week-days for short classes, Saturdays and all summer for more extensive activities. In this way, parks could actually be used by the people.

The demonstration would be a prototype for other small Centers. This Center would be located in Houston.

Children would formally enroll, but they could at times have the opportunity to change their interests if they find something else which engrosses them more.

The Center would aim at allowing children to be as independent and active as possible. It would aim at allowing the child to make decisions for himself; it would encourage the child to realize aspects of his own abilities and to have time to actually experience his world. It would help to develop manual faculties, imagination, and perception.

Crafts would emphasize drawing, modelling, painting, pottery, sculpture, tapestry, collage, weaving, design, and print. The child would have a choice of medium to
use for a common problem. He would be encouraged to work individually, and, at the same time, learn to help others with new skills. The children might even delve into architecture and build gazebos in the woods.

Dramatic activities would include mime, puppetry, ballet, and the production of plays. The children could act as playwrights, directors, set designers, costume creators, or choreographers, depending on the production. At times the activities would include creative dramatics, moments when the children could respond to music or a suggested situation with spontaneous play-acting.

Music activities would include private instrumental and vocal lessons, choral singing, and periods of group listening and responses.

A library would serve as a reference center. It would also be open to the children for leisure time reading and the usual lending.

In the evenings, the Center would be open to the public for filme shows, concerts, recitals, plays, puppet shows, ballets, exhibitions, carnivals, and events which could become a tradition to the Center. These would be presented, at times, by the children, and, at times, for the children. The Houston Symphony, small traveling companies, and other groups could perform for the children and their families. Parents and children would have a place to go together. The adults would also have an opportunity to recapture the
spirit of childhood, and perhaps, experience vicariously what they might have missed as a child.

The Center would promote things that are natural to innocent children: the urge to sing, ape, draw, dance, and to play-act. There could be no stronger argument than this—that they should have a place to do the things that they like to do instinctively to express themselves and that the place should shelter them from unnecessary adult guidance and interference.

The Center should be "another" world for them. It would be a place where adults were guests and the children hosts. It could be a secret world if they wish—a world reserved for exploration and discovery.

An ideal site should be able to provide seclusion: a thick forest. The site in Houston is the west end of Memorial Park, bounded by Memorial Drive, Woodway, and the West Loop. It is crowded with tall, slender pines and oaks. There might be a clearing in the middle of this forest; this would be the world for this society of children to be removed in their minds from the outside world.

The clearing space would be an enclosure. The floor of it would be around 300 feet in diameter, and the walls would be the thick trees—sixty to ninety feet in height—and the denser underbrush at eye level. In the clearing would be the main part of the Center, the clearly separated buildings housing the various activities. Among the
trees at the entrance would be the parking, the administration, and the paths to the clearing.

Architectural forms would have their origin in the growing forms of nature and familiar objects: umbrellas, mushrooms, trees, onions, flowers, and birds. The forms would be symmetrical—the most elementary order. They would relate to the bilateral symmetry of the human body and of plants. They would relate in the same way that songs with five characters relate to the five fingers of a hand. The forms would not attempt to blend with nature, but to relate to it.

There is an apparent problem of scale in relating buildings to diminutive people. There would be several approaches to this problem. The objects which would draw the eye (mullions, sculpture, handles, knobs, leaves, flowers, birds, and fish) would be small, perhaps hand-sized. Buildings would have sheltering, cantilevered eaves, with a dimension close to the height of people. The retaining wall would have another protecting overhang. The wall would also have hollows sized so that small bodies could squeeze inside with no room left over. The buildings would be full size, but the furniture would come in many sizes and would relate directly to the size of the children.

The child would also be allowed to experience contrasts in scale: the smallness of the studio galleries and the
largeness of the theater tower, the stairs, the openness of the clearing and the denseness of the forest, the darkness in the corners, and the lightness under glazed ceilings, the complexity of the windows and the simplicity of the walls, and many kinds of entrances and doors.

Basically, the system of color would be to have large areas that would be neutral in hue and light in value. Sunlight would create a repetition of the patterns of openings, leaving mysterious dark shadows on light surfaces. These would change as the sun moved across the sky. Small, hidden areas would have touches of surprise color.

Service would be handled openly: a service truck would drive onto the platform and unbad at the front doors of the buildings.

When a child is brought to the Center, his parent would leave him at the administration building, the watchtower-type building over the main gate. He would check in with the receptionist. Then he would go down the path to the clearing. As he went he would pass the lilly pond, go under the bridge, up the ramp, by the fish pond and the bird cage, if he went down the central path. Alternatives would be available: the two narrow side paths. If he were having a music lesson that day, he could deposit his instrument in the storage room at the music studio, then go about his activities for that day. If
he stayed most of the day, he could have lunch at the concession lobby in the first floor of the theater.

When he came back at night with his parents, they would leave the car in the parking lot and walk down a path lit by lanterns hung in the trees.

The theater would dominate the clearing because of the necessity of its size: to accommodate a large number of people. The people would be seated in pew-type benches instead of the conventional theater seat. Cushions could be marked for reserved seats. The pew seats would give the children a greater freedom of sitting position which they need. The two smaller theaters would be used during the day for classes and rehearsals. At night they would be used for small recitals and puppet shows. The large theater would be used at night for films and other medium sized productions. For a large production, the three cycloramas would be raised into the tower, clearing a space for a common stage, combining all three theaters into one.

The other four buildings generally have the same appearance (the doors are different, however). There is a large entrance space under the glazed dome and two galleries upstairs. In the library, the central space would be used for circulation and display, and the galleries for book shelves and reading areas. The central space of the music building would be used for small recitals, display,
and the chorus. In the galleries there would be the teaching cubicles for private lessons, rooms for group listening, and storage rooms for instruments and music. The craft studio spaces would be used for the various crafts. Furniture such as easels, tables, and other equipment would be placed where they were needed. The central spaces could be used for display of the children's work as well as travelling exhibits. The sloping walls of all the galleries would have storage cabinets. There would be basements to house mechanical equipment and additional storage.

The designing of details of this place would not end even with the contract drawings. There would be a "spontaneity fund" or a "felicity fund" to be used by an architect acting as supervisor who would continue to provide "things" like those described in the section on environment. He would see the place where a "thing" might go: a stone dodo bird, a canvas tent for a festival, and handholds on a wall for climbing. He might see where a surprise color could make a child say, "Hey, look at the blue." Many things might be added, directed by impulse.

The activity of visual design would continue after the Center opened. Children might be in charge of the planting areas each spring and watch how their seeds grew, or they might add some mosaic under an eave, or build that gazebo in the woods. The pattern of the paving stones, four-inch granite cubes set in sand, might change each
year, and each season might have its own festival for another change. The children would be consulted to help with the festivals: the tents and the displays and the pageants and the lanterns and the banners and the flags. Children would, in these ways, help contribute to their own environment and witness changes in their world.
Conclusion

There have been two searches in this project. One search has been the exploration of the imaginative possibilities of my mind with a release in an architectural medium. With children as clients, I had more immunity to censorship and a definite need to attempt designing imaginatively. The result is necessarily subjective, possibly naive, and as open to suggestion and serendipity as possible. These adjectives, coincidentally, apply to children, and the concurrence merely affords a further degree of empathy with the subject.

The other search has been one of finding reasons for the instinctive architecture: to give the instinctive operation a foundation for reasonable communication. Many things can be reasoned, and arguments for both sides may seem to have equal strength. For the instinctive person this search is finding patterns that exist and propelling or opposing the force behind the pattern. The formal investigation of children has generally enriched my previous prejudices. The prejudices do still exist. It has also given direct insight in areas where there was no instinctive seed present. Both searches have the enriching of childhood as a goal.

The demonstration was the vehicle for this dual activity, it made the image concrete and gave it direction.
Even though this purpose of finding my own imaginative resources is selfish, I have confidence that the demonstration is an idea that could be of great value to children today. I firmly believe that involvement in the activity of creation is going to develop the child's inner resources that will be valuable to him when he has to cope with serious, grown-up problems like the population explosion—resources that will enable him to either laugh at the race to the moon or face the adventure head-on. If the child is to stand his ground as a human being against the engulfing mechanization and bureaucracy, he must imagine and create. These things machines and systems cannot do; they are exclusively the possessions of humans. Childhood should be a time of freedom, and the child should take advantage of this freedom. He should store up resource energy for future responsibility.


