

Thinking Inside the Box: An Architect Looks at New Models for Children's Space

by Mike Lindstrom

I'm an architect and tend to think like an architect. We often think in terms of models and precedents when looking for inspiration as we approach designs. In the 18th century, Jean Jacques Rousseau used the primitive hut as an example of a pure expression of architecture in service of man. Unspoiled by the overwrought designs of the academic architects of his time, it was simple, functional, beautiful, and worthy of being a model and inspiration for all. Rousseau saw it as a representation of the search for that which is essential in the human condition.

In the same spirit, I would like to propose, as the new "primitive hut" of architecture for children, the Cardboard Refrigerator Box: a model capable of informing our search for the essential in the human condition writ small. In the quest to create wonderful spaces for children, it's also useful to look at several other non-traditional models and examples of how children behave "in the wild." But, you ask, do we really need a new and somewhat counter-intuitive paradigm for children's spaces? Why not? The current models (acknowledged or latent) are, to a great extent, inappropriate, exhausted of their creative potential, or followed so closely so as to have become bad recipes rather than powerful inspirations. New

models could invigorate our thinking about design for children.

Architects and models

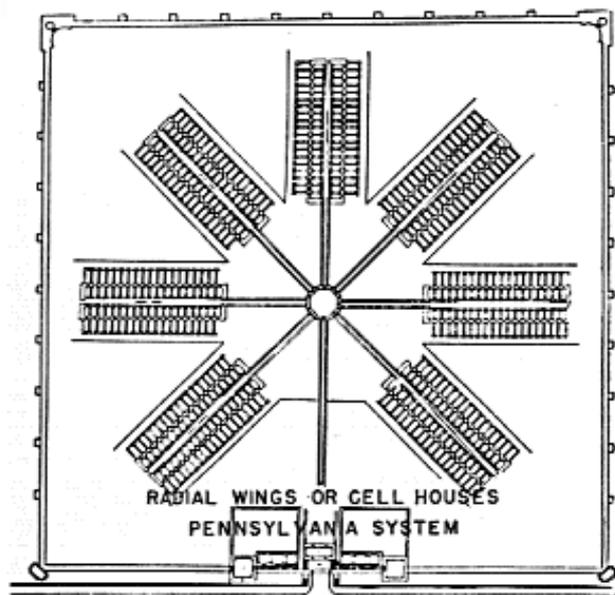
Architects rarely create buildings or environments without precedents, or models, in mind. Whether the model is a success in guiding the design process can be based on three criteria: 1) the appropriateness of the inspiration, 2) the richness of the inspiration, and 3) the skill with which it has been applied to the design problem at hand. Ideally, a rich, appropriate model or models would be artfully employed to inspire the design of space, building, or landscape. Alternately, a highly appropriate, very rich model could be completely bungled (think of a bad Frank Lloyd Wright house imitation) or a model of questionable merit could conceivably be turned into something extraordinary (think of Frank Gehry mining the memory of a carp in his grandmother's bathtub as inspiration for the Guggenheim museum in Bilbao with its shiny scales). The odds of success go up if one pays attention to all three criteria.

Is the model appropriate?

First of all, it's worth noting that purpose-built child care spaces have a relatively short history. Using existing child care spaces as inspiration for new child care spaces, while possible and to some extent inevitable, is also inherently limiting. While it may end up being a good idea to use a barn (or a carp, or a 1958 Chevrolet) as inspiration for your next museum design, it's comforting, both for the architect and the client, to know that there are hundreds of years of museum design history to draw upon and learn from.

Most child care centers designed today can trace their lineage back either to houses or schools and too many inadvertently draw on the institutions that many schools drew upon

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(prisons, for example — security, surveillance, efficiency and control). Between house and school, the house may be the more appropriate and the more fertile source of inspiration. The practical rub is that using the house as inspiration for a setting for 100 or more children in a limited amount of space can be a daunting task, particularly within a set of building regulations that equate children to non-ambulatory hospital patients. Faced with this challenge, many architects, consciously or unconsciously slide back into a more institutional mode. Conversely, when the house model is followed too literally, it can result in either serious functional limitations or a kind of kitschy parody. In either case, the architect may find him/herself trying to overcome the inspiration rather than being actually inspired by it. Leaving aside, for the moment, the question of whether or not a cardboard box is an appropriate inspiration for children's spaces, let us consider the second criteria.

Is the model rich?

Does the model evoke rich and diverse possibilities? We can think of this as analogous to the value of various props and settings for children's dramatic play. If a prop is generic and simple (let's say a 2 foot wide by 2 foot wide piece of plywood) very creative children may find inspiration in it, but many children may see fairly limited play possibilities. Add legs to the plywood to make a table that one can go under, over, sit around, etc. and the possibilities expand. Put a simple roof over the table and suddenly the variety of situations that children can create increases exponentially. But paint the whole thing purple and call it "Barney's castle" and

you've sharply reduced the creative play possibilities that don't involve *overcoming* the inspiration to one. A fertile source of inspiration requires a balance of evocative richness and non-specificity. In general, the richer, more fertile the model(s), the richer the final project.

Is the model skillfully employed?

This is key (even arming oneself with this article and several refrigerator boxes, is no guarantee of great space). Criteria for judging the quality of a children's space varies from project to project; and certainly some critical issues such as safety, economy, appropriateness of quantity and type of storage, etc. are less the product of *inspiration* and more related to a firm grasp of the functional requirements of child care. Models influence the spatial organization and flow (think prison model vs. piazza model vs. cloister model) on the one hand and sensory richness, scale, and physical relationship to the space on the other. We can think about how successful a model/inspiration has been by examining the spatial organization and overall feel of the project (with institutional corridors, for example, being less successful and spaces with activity-inspiring nooks and walls being more successful).

Applying models

Rich models, skillfully applied, will get at some of the most important (but sometimes difficult to achieve) aspects of how children live in a building or space.

Spatial Variety — Uniformity is one of the enemies of sensory richness. Does the project provide spaces scaled specifically to children? Not just *small*, but a variety of scales, spaces, and points of view that enhance the child's experience and support a wide range of activities, observations, and interactions. The most valuable models will also inspire experiences that are uncommon or difficult to achieve in the child care setting. The example of the bamboo grove is a good one. Lush but essentially transparent foliage can allow for *hiding* (often a difficult to achieve experience) in a way that also allows for supervision.

Comfort/Ownership — One of the fastest ways of telling whether children are comfortable in a space is to observe the child's body language and his or her contact with the elements that define the space. Imagine the child sitting on the edge of a chair in the doctor's examination room, poised on the edge of the chair, and barely touching the floor with the

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tips of her toes, physically withdrawing from the cold white walls. Contrast this image with that of the same child sprawled, looking at a book on a comfortable rug in front of the fireplace or on his back in the summer grass, looking up at the sky. Is the space comfortable? To what extent will it enhance the ability of the child to feel that this is “my space”?

Creative Engagement — Children learn by actively engaging their environment. They splash in the puddles, they press their faces against the cool concrete, or rhythmically rake their hand over the corrugated metal, bump, bump, bump, bump, bump. Some environments are excruciatingly hands-off (think back to the doctor’s office) and some are rich in sensory stimulation, spatial variety, and have an aura of transformability that invites the child to participate and learn from the environment: the messy art area with child accessible shelves, the tree house, or the creek bed lined with shining stones and crawly bugs.

Wonder and Discovery — To the extent that the environment provides experiences that are out of the ordinary, children’s everyday existence is enhanced and enriched. Whether these experiences are *built-in*, (the window that overlooks a cherry tree with a birdhouse), or generated by children, parents, and teachers (the amazing paper maché dinosaur that could be built because of the project room that was created), some spaces are clearly more *wonder and discovery friendly* than others.

The Refrigerator Box and other models

How then, does the refrigerator box fit into all of this? Let’s see what four non-architectural play settings can teach us and how they might serve to inspire design for children.

The Box — The refrigerator box seems to admirably address the issues above in its qualities as a play environment for children. It provides a scale that is most often missing from children’s spaces, analogous to the rabbit warren, the hobbit hole, or the doghouse; it is an intimate space that allows children to feel big. The box can feel very private and can support one, two, or three child activities that might be disrupted in a larger space. What could be more comfortable than the warm brown color, rhythmic corrugated texture, and box smell? Finally, it encourages creative engagement: it’s movable, can be manipulated, cut, moved, drawn on, and

colored. It can also be connected to other boxes or spaces as well as modified with doors, windows, or skylights.

The Tree — The tree is another archetypal children’s environment. It represents a wide range of spaces and scales, from the giant (looking up the trunk), to the intimate (nestled in the branches), to the miniature (squinting at the veins in the leaves). The various spaces are then modified by an amazing variety of light and shadow, sounds, breezes, and smells to create an ever-changing sensory-scape. Trees represent both comfort and adventure and can be places for solitude, teamwork, or competition. The tree is certainly an invitation to engagement in terms of the various ways to explore it physically, using it also by manipulating its various parts and as a dramatic play prop. Trees are the epitome of wonder and adventure providing inspiration, challenge, and extraordinary perspectives on the world.

The Attic — Secret spots filled with history and dust, two things that most child care centers avoid, attics represent a rich experiential change from the every day present and a tangible link to the past. Attics can represent comfort, in a well worn, velveteen rabbit kind of way. They are the antithesis of spaces that would fit into the cold, slick, gleaming category. They have creaky floors and filtered light and they invite participation because of their mysterious seclusion and because of their *things*. The *things* are critical because the attic as childhood archetype is not really an attic without boxes, old newspapers, dress-up clothes, and hidden *treasures*. And it is the objects, in combination with the challenging access, unique light, smells, and sounds that lend an air of mystery and adventure, wonder and discovery.

The Vacant Lot — The vacant lot does not have a high comfort quotient, as this is a place where the child meets the real world. This is the place where getting lost in the tall weeds may not be a real risk but the perception of risk is palpable. This is where one doesn’t play in *playground sand*, but real dirt, where there are heavy things to throw and roll, and where crayfish, spiders, and worms share the space. What it lacks in comfort, the vacant lot more than makes up for in creative engagement. Its very lack of organization makes it an attractive canvas for children’s activities and its *found* objects make for inspiring media. The little environmental artists and aspiring scientists and inventors are in an extremely fertile environment. The sense of adventure is nurtured both by the variety of props and settings as well as the clear absence of order and rules.

Literal and abstract inspiration

The vacant lot is, like the other three examples, a special place, far enough outside of a child's ordinary experience to preclude mundane responses, rich enough, evocative enough, and non-specific enough to inspire creation, interaction, discovery, and learning. If these examples inspire learning in children, how can adults learn from them in the process of creating spaces for children? The possibilities range from the most literal to the most abstract. There is precedent for literal use of these inspirations, and they have value in and of themselves. Bringing a big cardboard box into your classroom or playground will inspire creative play and, at least temporarily, enrich the spatial and scalar landscape. Giving children unfettered access to trees will inspire activities rich in developmental potential, and turning them loose in the attic or the nearest vacant lot would probably engender types of play not always in evidence in most child care centers (of course, many licensers, insurance agents, and many parents and teachers will read this and go into shock).

The literal implementation of these examples may, however, bump up against practical considerations. Some involve safety and security concerns either real (it's hard to control what children pick up or fall on in the vacant lot) or regulatory/litigious (regulators who feel supervision = surveillance or very real concerns about a culture where potential liability is everywhere). Other impediments to literal implementation may involve space ("where do you want this giant maple tree?") or budget. But moving beyond literal interpretations should actually expand the number of possibilities that are afforded. A short step beyond literal, for example, in the case of the vacant lot, is the adventure playground where the rich possibilities of the vacant lot have been intensified (more boards and tires and rope), the worst of the risk removed (no broken glass or jagged rusty bits of metal), and the ability for children to engage the environment enhanced by providing tools, paint, pulleys, and qualified play leaders. One could imagine a mezzanine space in a preschool or school-age room that was very *attic-like* with

partially lowered ceiling under the eaves, an old trunk with dress-up clothes, small windows overlooking the main space or outdoors, old magazines to cut up or read, and old clocks to dismantle. How much richer would this space be than the mezzanine without the attic inspiration?

Other examples could be much more abstract. Imagine a two level climbing loft where the upper area takes its inspiration from a tree and the *ground* level from a refrigerator box. The upper level has a skylight providing a view of the clouds and sky; the *railing* around the loft takes a filigree, leaf-like form; the whole structure is supported by a heavy timber center post; and plants and a bird cage are located up above. The lower level could be contrasting *crawl-in* spaces and perhaps movable panels and flaps that allow children to manipulate the space. This type of design would fit the criteria outlined above providing spatial and scalar variety in a setting that is non-specific enough to suggest multiple dramatic play activities.

The lesson for designers

In the end, the lesson for designers (and those who work with and depend on them), is not that all children's spaces should harken back to boxes (or vacant lots, etc.) but that everyone involved in the design process needs to be conscious of those "models" that are brought to (or sneak into) a project and actively search for fresh "inspirations": inspirations that are appropriate (ideally somehow related to the specific project), rich in possibilities and flexible and non-specific enough to propel the design rather than hinder or constrain it. The design team should also be willing to jettison ideas if and when it becomes clear that they are leading the project in the wrong direction or becoming *the tail that wags the dog* — like the round room that the architect really believes represents community, but is impossible to furnish and difficult to use. If we are honest, creative, and critical about what is inspiring us and energetic in pursuing the possibilities presented, then we are giving our projects a much better chance of success.

Using Beginnings Workshop to Train Teachers by Kay Albrecht

New models: Explore Lindstrom's ideas of appropriate models for the environment. Rather than accept inappropriate environments, see if some creative visualization might just bring some solutions or strategies to the center space!

Cardboard boxes: Use the model of the refrigerator box to explore with teachers ways to open children's play to the possibilities. Bring in a variety of boxes and encourage teachers to find ways to use each one as a model for impacting the environment.