Crafting Content, Play and Space through Participation

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(Presented by Peter Exley)

The Five Rules Of Architecture:
1. *Make it BIG*
2. *Make it RED*
3. *Make it a Sign*
4. *Don't be polite*
5. *Get an artist to do it*

(attributed to Steve Izenour 1940-2001)

Architecture surrounds adults and children every day, but little time, if any, is spent defining it, critically considering how the built environment affects people and how they, in turn, can affect the environment. The architectural environment is itself a work of art, both shaped by culture and shaping culture. As such, it influences human behavior, causing stimulation or suppression, generating a sense of joy or fear, and encouraging or discouraging the creative process. As such, it influences learning, as both a critical tool and a critical environment. Participatory architecture for children is powerful. As such, it creates opportunities for children to become literate co-builders of the design process. Experience can build expectation – good design as the expectation rather than the exception.

Some Observations Relating to Participation in the Design Process

Why aren't more architects partnering with children? Is it because they don't view designing as a collaborative method? Is it because collaboration would cost time, money, and materials that schedules and budgets may not be able to afford? Is it because children are not acknowledged as being valuable members of the design team? Is it because children's abilities to communicate about the design process are in question?

Current trends in participatory research, which relate the physical environment to the quality of early childhood education, are inconclusive. They tend to focus mostly on functional layouts or space standards, issues that are "pragmatic" in nature, such as accessibility or safety. Reference is often made to the environment of the child and the importance to the underlying educational curricula, such as a design of a Montessori facility for preschoolers. However, research studies find few links between architectural and spatial and curricula requirements and the needs of children in relation to their surroundings. In a recent assessment of educational facilities, it was apparent that educators and architects had a lack of communication regarding fundamental pedagogical and design issues (Dudek, 1996).

Currently, architects are erring towards the pragmatic and the "heroic and original" rather than to the underlying needs of the child.

Antoine de Saint-Exupery, author of *The Little Prince*, stated that "grown-ups never understand anything for themselves, and it is tiresome for children to be always and forever explaining things to them." Do children understand their environments in very different ways from adults? If the child has distinct architectural and environmental needs and wants, how can she learn to voice these to architects and designers so that all involved understand them? How can the child participate in the design process itself, thereby creating critical environments that best represent his or her own cultural interests? How can architecture and environment contribute to the child's educational, emotional, social and cultural growth? The architect should be encouraged to take responsibility for advocating on behalf of and including the voice of the child.

As a champion of the participatory process in architecture, the perspective of architect Charles Moore's perspective is more idealistic and visionary. Kevin Keim, biographer, states that Moore's work continues to greatly influence culture as well as American architecture. "At no point did he, or we, lay out an encompassing, carefully constructed theory, answerable for its own internal consistency. In a sense, participation with others in a collaborative act of making replaced the wish for theory" (Keim, 1996, p.155-156). Moore and his contemporaries (Lawrence Halprin et. al.) persistently collaborated with community groups to produce an admirable body of participatory architecture.

Classical Criteria for the Design of Family Oriented Spaces

The well-known Vitruvian model of *Firmness, Commodity and Delight* is aptly translated to Pragmatics, Developmentals and Inspirationals, which can be utilized as a design model for family oriented space. Arranging this in linear fashion – pragmatic being the most quantitative criteria, inspirational the most qualitative, and developmental issues hovering in the center – presents an interesting diagram. Overlay the ordinary approaches to the design of architecture and spatial experiences aimed at children and their caregivers and patterns develop. Schools have a tendency toward the pragmatic –reflections of a narrow, linear, administrative and disciplinary bias. A commercial environment (say a fast food restaurant with indoor playground, or a theme park) falls at the extreme periphery – on one hand, it is over stimulating (though frequently it's a one-liner with little staying power), on the other, it has fiscal ramifications where design is calculated and calibrated to the extreme – there's little true "developmental" content. A children's museum delightfully meanders through all three criteria, excelling in particular in the developmental and inspiration criteria quotient, while quietly satisfying pragmatic non-negotiables. Children's museums have a tendency to be very creative, non-linear experiences. They have learned how to be culturally, socially, and economically relevant. Art and history museums tend more to the center of this diagram, relying on collections-based objects to provide delight through passive experience (necessarily dictated through the sacred nature afforded unique collections).

The Process of Participation for Family Oriented Spaces

It's ideal to honor the multiple perspectives inherent to a project at the conceptual phase, and to review, compare and solicit input at reasonable points throughout the design process with appropriately focused "choreographed" groups, and occasionally, to open the discourse to chaotic assemblages of everyone invested in a project.

Establishing a datum of childhood, either retrospectively by those no longer in that stage of man, or from the current experiences of children, is ideal. The datum is best created in public forum, such as a series of workshops, without interruption or editorial input from any participant, and with only minimal facilitation from the design team – all participants are afforded equal footing. Adults typically reflect nostalgically on games played, places hidden, forts built and cities imagined (drawn, built in Lego, written or somehow created). Alice McLerran's book Roxaboxen is one such magnificent reflection – most people relate to the experience of marking space, creating enclosure, changing perspectives, establishing and shifting roles, and interaction in varied and varying degrees. Reestablishing perspectives on childhood for adults is most useful in stimulating creative brainstorming (minimizing suggestions of lift-up flaps and push-button induced activity). Such reflections also serve as reinforcement that the open, accessible, safe places recalled have decreased in number with each successive generation.

Children often present a superb array of current activities, both in vogue and timeless. Flying kites (or variants on the harnessing of wind power), writing stories or publishing a newspaper, organizing elaborate treasure hunts or scavenger expeditions, climbing trees, or other vertical challenges, and many other expected and unexpected occupations and distractions of childhood come from recent brainstorming sessions.

Contemplating relevance to children (sometimes this might be construed as figuring out what's "cool") and avoiding preconceptions (or even architectural theory) is essential and critical to the process of generating good engaging experiences. When environments are culturally relevant, families interact and engage within their surroundings. Following introductory rumination and workshops, the goal should be to establish possible physical frameworks for this "cool" stuff within the context of a community or institution. Brainstorming with these reflections might lead to developing the flying of kites into the suggestion of creating a large scaled wind tunnel inside a children's museum, for instance. In an historical society, the budding journalist might envision the mock-up of an oversized magazine cover, with visitors enacting the cover story. An art museum exhibit on "Architecture for Children" interprets a playhouse that is integrated into the threshold. This surprising element also functions as an introduction to more "ordinary," "didactic" elements deftly woven through a treasure hunt. A children's zoo contemplates children (or those so inclined) climbing into a tree canopy to observe birds, snakes and insects at their level, versus taking a safe and expected route on terra firma – it actually imagines both scenarios, and perhaps others, in order to tell a complex, elaborate and evolving tale. Children observe, reflect, climb, perch and discover new environments and experiences through these spatial vehicles and integrated concepts.

Layers of input from workshops (where the participatory process involving children and community is most fruitful), interviews, and observations enable the tabulation of a program, alongside narratives and illustrations that describe potential experiences and environments. Reflecting upon this descriptive framework, the next step embraces the content driven input of design team and museum representatives. The use of a "developmental checklist" is a good tool for ensuring that space and place contain experiences that are meaningful and age-appropriate. Current pedagogical theories, including Howard Gardner's multiple intelligences, can provide a framework and organization to work within and are a good device for developing this enrichment. Weaving in books, numbers, nature, music, physical challenge, interaction with others, points for reflection and art (to paraphrase the eight or nine "intelligences," or "smarts") validates an environment through appropriate content. Establishing beauty and aesthetic sensibilities helps entice interaction. Infusing environments with multiple experiences that satisfy many on different levels inaugurates longevity of experience and opportunities to make new discoveries over time.

Beyond the suggestion of open dialog during design phases, participation should extend to prototyping. As designs are solidified, observations on how the pragmatic, developmental and inspirational needs and wants will hold up through mock-ups will help confirm that an idea is adequate, flexible and a delight to behold for multiple outcomes and perspectives. Or it will suggest an alternate solution. Creations that results in singular, predictable, one-dimensional outcomes is useful, if humbling. Negative experiences should be seen as learning opportunities within the prototyping process. Designer, educator and curator learn from these observations, successes, and disappointments. When the input of educator, curator, community and designer is separate and discreet, the likelihood of creating the really cool and paradigm shaping diminishes. Tangling the inputs, sharing the perspectives, trusting the stuff, and collectively engaging in the design process is the participatory model. This results in the creation of a flexible environment not dependent upon singular perspective, nor a unique visitor, viewer, or participant. Participatory involvement should continue after the formal design and construction phase is concluded. Environments should encourage evolution and adaptation through programming (or even adaptive design) that results from the observation of interaction with the space and use of the interactive space.

Architecture For Children

By taking an inclusive approach (collaborating with children and client representatives), a designer/architect encourages and nurtures the communication and design process. By creating valid opportunities for both young people and the community to become involved in decision-making, their special needs and wants within the environment will be articulated, recognized, and responded to.

Architecture for children is not necessarily a building type or style, but the opportunity to create "places" of collaboration and participation, which are indispensable for everyone's growth, ultimately seeing the architecture created as a work of art – a creation of a meaningful environment that supports learning, content and play.

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