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# A Lifetime of Creating Play Environments

## An Interview with Jay Beckwith

As an artist, Jay Beckwith has used his interest in play sculpture to grow communities, and his book *Build Your Own Playground!* (1973) serves as a manual for community development. His concepts and designs have become an industry standard and can be found on most playgrounds worldwide. An active gardener since childhood, Beckwith—a board member of the School Garden Network of Sonoma County—and his wife Cecily Clover created an ideal small farm in the hills above Gration, California, on which they maintained sheep, chickens, a fruit orchard, and a quarter-acre food garden. Over a decade ago, Beckwith gathered a group of friends to create the Sonoma County GoLocal Cooperative.

***American Journal of Play:*** Tell us about where you grew up and how you played as a child?

**Jay Beckwith:** Until high school, I lived in Lynwood, California, in a tract home built after World War II. We dug huge fox holes as the main source of play beyond the streets, in which we flew kites and rode bikes for miles around without our parent's knowledge. I raised pigeons and had a dog. I flew ten-cent balsa gliders and built model airplanes. I would cut up rolls of caps and make explosions, some of which were quite spectacular.

***AJP:*** You are perhaps best known for your work on redefining the modern playground. What training and study did you engage in to prepare you for such a career?

**Beckwith:** I was always good with my hands, and my dad allowed me to build anything and work alongside him on construction projects at home and in the neighborhood. In the art department at San Francisco State, I was fortunate to fall in with a group that became known as the art thugs because we would terrorize those who we thought were posers. I made outrageous sculptures, including an eight-foot-long hot dog in a flocked bun, which

I parked outside the ceramics studio as a message to the teacher who was hitting on all the female students. Once out of school, I started making play spaces for early childhood programs like Head Start and Montessori schools. You must remember that in my youth, play apparatuses were limited to slides, cube climbers, turning bars, swings, and monkey bars. All these things are made with galvanized pipe.

**AJP:** Why are playgrounds and built play environments important?

**Beckwith:** Although the best play spaces have features such as creeks, hills, trees, and found objects, most cannot endure the thousands of hands and feet found on school grounds or in an urban environment. These days, I am obsessed with developing the materials and technologies needed to replicate as much as possible a natural environment that is sustainable for the densities we force our children into so that we can supposedly educate them. The science is clear: children learn best when they can create their learning through playing with objects they can control in the company of other children. The best example of this sort of playful learning can be found in the Anji Play early childhood programs in China, which started with one inspired woman and became a national standard.

**AJP:** Can you tell us about the first play environments you created?

**Beckwith:** I did a few park play spaces in San Francisco, and most subsequent projects focused on children from five to twelve years old in schools. Because the only options at the time were steel, and we had many people who wanted to help, we focused on wood construction and community building.

**AJP:** What did you learn from your experiences observing animal behavior and building play environments for animals at the San Francisco Zoo?

**Beckwith:** Watching monkeys confirmed my sense of the need for physical play and the types needed. Observing the gorillas and subsequently getting to know Koko helped me see how play was a primary vehicle for social development. Did you know that many species of primates spank their children? In one case, we turned a sterile cage in what was known at the zoo as death row into a complex environment. The occupant had devolved stereotypically into pacing back and forth. Within days, these behaviors disappeared and were replaced with play, grooming, and mating. These behavioral changes encouraged us and the zoo staff to enrich many cages.

**AJP:** How did you apply these lessons to designing play spaces for children?

**Beckwith:** Seeing how animals reacted strongly reinforces the lessons Bernie

De Koven powerfully articulated in his 1978 book *The Well-Played Game*. The two most powerful lessons are about freedom and complexification. Children learn at a gut level that play is the essence of democracy. Through play, kids learn to play fairly and expect that from life. When I see widespread play in a community, I know there will be freedom and democracy.

**AJP:** Your 1973 book (with coauthor Jeremy Hewes), *Build Your Own Playground! A Sourcebook of Play, Sculptures, Designs, and Concepts from the Work of Jay Beckwith* was a textbook for creating a community playground. What were these community playgrounds? And what social and cultural forces drove this movement?

**Beckwith:** By community, we meant built by. The cultural revolution of the late 1960s was in full swing, and power to the people was alive and well. To paraphrase what we explained in the book, a growing number of communities needed places for children to play that the kids could call their own, but they did not want bureaucrats deciding what these play spaces should be. It made a great deal of sense to us that the people whose children would be using the playgrounds should play a leading role in creating them. Most importantly, when a community works on its own play spaces, it is investing in its creation in very different ways than when contractors or city construction crews do. The playground reflects the unique personality of the people who live there and build it.

As opposed to the familiar steel swings, slide, and monkey bars, these community playgrounds—although they incorporated some of these features—were usually made of wood with large, interconnected platforms, bridges, ramps, tunnels, and more. These wooden play structures were closer to the look and feel of backyard treehouses, forts, and hideouts than typical city playgrounds.

**AJP:** What sorts of material and technological changes informed the choices you were making as you designed new play equipment and environments in the 1970s and 1980s?

**Beckwith:** The big change for us was working with Mexico Forge, a producer of metal equipment that was sold by most of those reps who represented BigToys. They urged me to go to Mexico Forge and rescue the company. That allowed me to use five-inch tubes that provided the same visual density as the five-inch BigToys wooden posts. I invented a universal clamp that can be attached anywhere and connect cross pipes to support attachments such as decks. These inventions gave us a robust and visually appealing set

of tools that could be used in infinite ways. The downside is that I didn't predict that such a wonderful pallet would be used in a cookie-cutter fashion. But as they say, no one ever went broke underestimating the taste of the American people.

**AJP:** What affect did the development of new playground safety standards in the late 1970s and 1980s have on your work?

**Beckwith:** In the United States, there was a group of "play people" who attended the American Alliance for Health Physical Education and Dance conventions and gathered to address the issue of two-hundred-thousand children arriving in emergency rooms from playground injuries. This academic effort was validated by the Consumer Product Safety Commission, which issued playground safety standards. Our work that led to the standards gave plaintiff attorneys all they needed to sue the bejesus out of park departments for injuries on the old-style equipment. So today, all that old stuff is gone and has been replaced by a new, safer apparatus. The only problem is that there has been no diminution in hospital visits. The lesson is that kids play up to the point of pain—and then some.

**AJP:** Your 1980 book *Make Your Backyard More Interesting Than TV* and the 1986 *How to Design & Build Children's Play Equipment* moved your focus from developing community playgrounds to helping families build play environments in their own backyards. What inspired this shift?

**Beckwith:** I was bored and needed to focus on kids rather than running a company that sold my designs. In addition, to paraphrase what I wrote in *Make Your Backyard More Interesting Than TV*, there were many parents at the time who realized that television had become a kind of babysitter. They wanted to provide more active experiences for their children, but the prefabricated, commercial play structures available in stores were neither adequate nor exciting. To interest children, a great play environment had to be child centered and meet kids' needs for motor, balance, social, and constructive play. I was also aware that there were commercial play sets available, so our book was also a manual on how to replicate these products.

**AJP:** What have you learned from studying children's play while designing and building play environments?

**Beckwith:** Play behaviors in children, and other animals with complex

brains, arise out of basic biological drives. Play behaviors are initiated by environmental triggers which elicit predictable play actions in all children. For example, a tree with certain shapes will stimulate climbing, while a railroad track offers children the opportunity to practice balance. I have identified twenty distinct play patterns, or behavioral schemas that organize the body and its relationship with the environment. A typical playground supports only six of these, while a good early childhood program supports nearly all.

**AJP:** Can you tell us more about these play patterns?

**Beckwith:** The eight earliest play patterns—sensory, bond, swing, curiosity, grasp, wet, spin, and hide—are all examples of adult-facilitated infant and toddler play. For example, the swing play pattern is triggered by suspension, spinning, or rocking. We know that rocking and swinging are essential for developing the vestibular system and that slow rocking in particular helps calm infants and encourages child-parent bonding. Rapid swinging is stimulating and affects the proprioceptive system, which helps our bodies sense movement without thinking about it. The grasp play pattern is triggered by fingers and small objects. This is called muscle memory. Primates are the only animal with opposable thumbs which give them the capacity for precision grasp. Infants use their index finger almost like a direct link to their brains as they poke and prod around, investigating their world. They touch, grasp, gather, collect, and practice pattern recognition while playing.

At the preschool age we see even more physical play, and these learning play patterns include slide, locomotion, jump, and climb. The urge to climb is powerful and begins within months of birth. This play pattern is triggered by climbable scaffolding. Climbing is one of the primary ways that children build physical strength because they have to lift their body weight repeatedly. Children also develop motor planning, or the knowledge about how to move one's body in order to navigate to one's goal, through climbing. For example, swinging from branches is climbing. The first phase is to hang by one's hands. The next step is to go from limb to limb, or in the case of a child on a playground's monkey bars, from rung to rung—a skill called brachiation.

**AJP:** What other kinds of play patterns have you identified? How do they function?

**Beckwith:** There are four peer play patterns: contest, ball, combine, and pretend. The contest play pattern is triggered by a challenging playmate. There is a language to these mock battles that prevents them from becoming serious. We can easily see this play fighting in dogs who seem about to devour each other when they will suddenly stop, look around, and then go back at it. This rough-and-tumble play can be extremely beneficial. Not only does it help the body integrate and build strength, but it also promotes social and emotional learning. The combine play pattern is triggered by loose parts. Children start combining by simply placing objects together. The Swiss psychologist Jean Piaget described this as “positioning.” The mental task for the child is to discover how the objects relate to one another. For example: Can they be stacked? The next step is to connect the elements. Here, children expand the concept of the related parts, and through connecting, build their first system. This is followed finally by transformation, in which children combine the elements to create something new.

The last four play patterns fall under the larger category of communal play patterns and include mapping, rhythm, story, and parade play patterns. The mapping play pattern is triggered by a new place. The young of most species spend a significant amount of time exploring their immediate surroundings so they know where to find food, water, and shelter. This kind of roaming and exploration is important. Unlike children who are transported to school, those who walk or bike can create very complex maps of their neighborhoods. The rhythm play pattern is triggered by sound makers. One of the most powerful aspects of rhythm and music is that it fosters deep emotional bonds. It is a type of play that involves a lot of mimicry and is an early form of mutual communication. The combination of rhythm and words leads of course to songs, and songs lead to the development of memory—memories with a particularly strong emotional component. In addition, song and rhythm lead to dance and community events. Indeed, the biggest benefit mankind has gained from rhythm is its power to build community.

**AJP:** Over your career, you have worked with many companies to design or improve play equipment. Can you tell us about a particularly memorable project you worked on?

**Beckwith:** Without a doubt, the most memorable part was our team's work with Gymboree Play and Music, a company that provides play-based learning opportunities through developmental play, music, and art classes for young children and parents. You can learn more about it and see some of our work in the video "Designing for Play." It is on YouTube.

I am especially proud of the Gympo Play System because it is an elegant solution for seemingly contradictory requirements. It must be robust enough to support a three-hundred-pound adult but be disassembled in a few minutes by a staff member of small stature. It must provide typical play experiences but also have a unique brand appearance. The system has to meet all known safety requirements which can differ from country to country. Most difficult of all was meeting all expectations at a price that the franchisees could manage and keep class prices at the same level.

**AJP:** You have created play environments for a wide range of ages. What differences should caregivers keep in mind when deciding if play equipment and environments are appropriate for infants and toddlers?

**Beckwith:** Stand back and watch. Intervene only when the child asks for attention.

**AJP:** When you look back at your career, how have play environments changed since you started designing them in the 1970s?

**Beckwith:** They have gone from stuff a plumber could make to using contemporary materials. However, the underlying concepts and benefits haven't changed. I wonder what materials and concepts would need to be developed for many more developmentally appropriate activities, such as playing with loose parts.

**AJP:** Today, many children spend their playtime with video games or in other entirely digital environments online. Can you tell us about your efforts to integrate digital gaming into physical playgrounds?

**Beckwith:** I thought there was a chance in 2016 that *Pokémon Go* could get kids outdoors. At the same time, there was a short period when this seemed to be the case, but the game is no longer popular. Why *Pokémon Go* has largely disappeared would be a great subject for a master's thesis or even a doctoral dissertation.

I find it astounding that today most children have their own con-

nected devices of enormous capabilities, and yet these remarkable devices have not found their way into children's games and play in any substantive way. This tells me that the incentive for enhancing the utility of connected devices in the everyday life of children has little to no traction in the minds of Silicon Valley entrepreneurs. This may be due to the prevailing sense that digitizing children's play is understood to be ill advised by those who know technology best.

I did a deep dive into digital gaming as a way to enhance social interaction on playgrounds. My thought was that kids with various disabilities could use an avatar to interact with kids with typical motor skills. What I discovered was that there is a prevailing sense among parents with atypical kids that they want their children to be able to relate to other children as naturally as possible. This translates into allowing their children to initiate and participate in social interactions as spontaneously as possible. Thus phones should become a part of their social life on their own initiative.

**AJP:** What's the most important thing to consider when building a play environment today?

**Beckwith:** Try to get as close to nature-like experiences as possible.