LONDON STUDY OF PLAYGROUNDS

The Influence of Design on Play Behavior in London vs New York, San Francisco and Los Angeles
Studio Ludo is a non-profit organization whose mission is building better play through research, design and advocacy. We believe that everyone deserves a great place to play. Building on over a decade of experience in the design field, with a focus on play, Studio Ludo was founded in January of 2015.

Since our inception, we have received numerous accolades for our work. We were the winners of the international design competition, Play Space, as well as finalists for two projects and winner of one for the Kaboom Play Everywhere Competition. Our research has been presented at national conferences for The Association for the Study of Play and the US Play Coalition, as well as through the American Society of Landscape Architects Online Learning Series. We have been published in Landscape Architecture Magazine, Context: The Magazine of the AIA Philadelphia, GRID Magazine and the Atlantic.

Research is the core of our organization, and directly informs our design process. The London Study of Playgrounds serves as the basis for much of our thinking about play, and helped to launch Studio Ludo. In the spring of 2015, over a six month period, we visited 45 playgrounds within the 1 km radius of the center of London, and selected 16 as part of our study. Upon returning to the US, we compared our findings to the National Study of Neighborhood Parks by the RAND Corporation, to understand the influences of the design of playgrounds on play behaviors and physical activity levels in children and teens.

This report contains a summary of our methodology, our initial findings, as well as images of the 16 play spaces. It is the first of two reports. The second will be a more in depth look at play behaviors related directly to surfaces and play structures, as well as an assessment of playground injury rates in the UK vs US, and cost differences in playground installation and maintenance in the two countries.

Happy reading!

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Studio Ludo
THE PLAYGROUNDS

16 SELECTED PLAYGROUNDS
45 VISITED PLAYGROUNDS
CHARING CROSS - CENTER OF LONDON
Playgrounds in the study ranged in size from .22 acres to 3.5 acres, and were selected based on the uniqueness of their designs, variety in surface materials and open ended, non-prescriptive play structures.
Our assessment of the 16 playgrounds in London was completed April-May 2015. Observation periods were from 8am-7pm, every day of the week except for Fridays, which was a rest day for the data collectors. In the case of this study, our data collectors consisted of a 35 year old female and a one year old child. It is important to note that the presence of the child was crucial in gaining access to the playgrounds, as many spaces would not admit an adult without a child. The data collectors were not counted in any observation periods.

Every playground was observed at least three times per day on two weekdays and two weekends. Observations were done through videography, completed in 5-10 second sweeps of specific areas of the playgrounds. This resulted in over 250 distinct observations periods, over 1600 videos, and the categorization of almost 15,000 people.

We observed first by surface, breaking down a playground into categories such as: sand, mulch, rubber surfacing, concrete, planting, and grass. We then observed individual structures within that surface. For play structures that were large and had restricted site lines, we subdivided them into use categories (e.g. structure with slide versus structure with climber). All objects within the playground were assessed, including all site furnishings and site features (rocks, trees, etc), in addition to structures installed strictly for play. (See Sample Mapping Protocol, at left).

To analyze the videos, we used the observation protocol developed by Dr. Deborah Cohen and Dr. Thomas McKenzie known as SOPARC, the System for Observing Play and Recreation in Communities. SOPARC categorizes users by type of physical activity (sedentary, moderate and vigorous), age (infant, child, teen, adult, senior), apparent ethnicity (white, black, middle eastern, other), and apparent gender (male, female). This protocol utilizes direct observation only, so visual observation of gender and ethnicity is used, rather than response via interviews. (See Data Analysis, at right).
Over a two month period from April-May 2015, we conducted 253 observations, took 1638 videos and categorized 14,853 visitors by age, gender, ethnicity and activity levels.
We partnered with the RAND Corporation to compare our London playground data to their National Study of Neighborhood Parks (NSNP). We focused on New York, San Francisco and Los Angeles, as these cities had population densities that most closely matched that of London. We used Geographic Information System (GIS) to define population densities in the 1 mile radius around each playground to establish comparison US playgrounds.

We found 8 playgrounds in the NSNP that most closely matched those studied in London, based on size and population density. Many of the London playgrounds are much larger than the ones studied as part of the NSNP, which resulted in 8 having no comparable match.

CLAPTON COMMON PLAYGROUND (.22 AC, 92,833 POP/MI)
MARCONI PARK, NEW YORK CITY (.19 AC, 78,224 POP/MI)

JUBLIEE GARDENS PLAYGROUND (.24 AC, 68,429 POP/MI)
HILLTOP PARK, SAN FRANCISCO (.25 AC, 71,796 POP/MI)

KILBURN GRANGE PLAYGROUND (.32 AC, 98,815 POP/MI)
COM. BARRY PARK, NEW YORK CITY (.59 AC, 96,025 POP/MI)

KINGS SQUARE GARDENS (.63 AC, 139,585 POP/MI)
BROWER PARK, NEW YORK CITY (.46 AC, 171,637 POP/MI)

KNIGHTSBRIDGE PLAYGROUND (.47 AC, 56,862 POP/MI)
SOUTH PARK, LOS ANGELES (.34 AC, 69,697 POP/MI)

OLYMPIC PARK PLAYGROUND (.54 AC, 53,047 POP/MI)
ST MARY’S REC, SAN FRANCISCO (.3 AC, 63,111 POP/MI)

SPA FIELDS PLAYGROUND (.42 AC, 132,369 POP/MI)
WILLIAMSBIDGE OVAL, NEW YORK CITY (.4 AC, 114,667 POP/MI)

WELLINGTON PLAYGROUND (.25 AC, 56,220 POP/MI)
POTRERO HILL, SAN FRANCISCO (.38 AC, 52,153 POP/MI)
We found that playgrounds in London had 55% more visitors and 16-18% more physical activity in children and teens than comparable playgrounds in San Francisco, Los Angeles and New York.
THE CONCLUSION

Upon finding that London playgrounds attracted more people and encouraged more physical activity, we developed a number of lessons learned about the London playgrounds that made them so different from their US counterparts.

1. KIDS KNOW HOW TO PLAY

Playgrounds should not tell kids how to play, with structures that provide simple loops of climb a ladder, slide down, repeat. Non-prescriptive and open ended elements, like nets and climbers, logs and loose parts, let children create their own fun.

2. KIDS ARE ATTRACTED TO NEW EXPERIENCES

We learn by trying new things and seeking out thrills, leveling up to more complex tasks and environments. The best playgrounds look dangerous, but are completely safe, offering unlimited ways to play based on skill level, strength and bravery.

3. THE ONLY RULE SHOULD BE TO HAVE FUN

Everything in a playground should be playable, because kids don’t see the difference between a play structure and a puddle. Plants, trees, rocks, surfacing…everything is up for grabs when kids are concerned. And no signs with lists of “do nots”!

4. KIDS LOVE TO HIDE

Kids love to build forts or dens, they like to be in small cozy places, they enjoy the sensation of being invisible, even if we really can see them. Playgrounds should provide places for kids to be in their own private worlds, while still staying within the boundaries of the play space.

5. CAFFEINE AND A BENCH

Almost all of the playgrounds we visited in London had a café and lots of seating with great sight lines. This meant that parents could sit and chat, watch their kids, but keep a respectable distance without interfering or assisting with play.

NEXT STEPS

The intention of this initial report was to understand the influence of the design of playgrounds on play behaviors. It was based on our observations of playground user demographics (age, gender, ethnicity) and physical activity.

However, we also recorded information regarding users relationships to surfaces and specific play structures, as well as the type of activity those structures promoted (e.g. climbing, spinning, swinging, sliding, rocking, hanging, walking, jumping, crawling (for crawl tubes), balancing, sedentary (including activities like playing with sound equipment or moving equipment parts (e.g. a steering wheel on a playground boat) that requires sedentary behavior). Our follow up report will look specifically at how the these elements within playgrounds influence behavior and physical activity.

The follow up report will also discuss playground injury rates in the UK vs US, cost differences in playground installation and maintenance, as well as differing views on risk and code compliance. There are a variety of influences on playground development, from the views of designers, manufacturers, owners/managers, as well as code and litigation concerns.

These reports hope to provide these various constituents/agencies with sound data and research on which to make educated decisions about the design of the built environment for children, and to understand the impacts that these decisions have on children’s long term health and wellbeing.
A wide variety of play equipment, and often filled with teens attracted to riskier play elements like the spinner, which elevates kids almost completely horizontal as it spins.
A massive hill slide so popular they had to install rubber surfacing around it, not to protect from a fall, but to stabilize the soil, along with log climbers imbedded into hills and sand play for young kids.
A playground of salvaged trees, lumber and found objects create fantastic forts and climbing experiences in a very small footprint.

LOCATION: BOROUGH OF HACKNEY
SIZE: .22 ACRES
A combination of standardized play equipment, huge swaths of sand, salvaged trees, large net climbers and a play mound with embankment slide and boulders as a focal point.

LOCATION: BOROUGH OF HACKNEY
SIZE: 1.42 ACRES
In the heart of city, right next to the London Eye, with huge log scramble climbers and swings for older kids and climbable sheep and rocking chickens for the littlest visitors
Built almost entirely of salvaged materials, including a piano turned on its side within a wall for playing, old fishing nets and wooden windows built into forts, as well as several big slides
A massive sand play area fuels messy play at a series of water spouts and runnels that ultimately empty into a rain garden, adjacent to a spray area and artistic steel playhouses.
A spin on a nature play space, with a climbing structure made from salvaged trees and chipped rubber surfacing that blends well with the more natural surroundings.
Almost three playgrounds in one, with a distinctive concrete slide and climbing wall next to a sand play area, a nature play space with salvaged tree climbers, and a few standardized play structures.
Huge rubber surfaced climbing mounds accentuated with large scale timber and net climbers, as well as large sand area with water spout and boulders for seating for caregivers.
Massive concrete mound with three huge slides down its face, the back of the mound is covered in concrete steps and plantings that were always densely populated with teens.
Designed after the Peter Pan story, complete with giant pirate ship in a large sand area, stone alligators to scramble over, a look out with a treasure chest, and a large boulder fountain for splashing.

LOCATION: BOROUGH OF KENSINGTON AND CHELSEA
SIZE: 1.98 ACRES
SPA FIELDS PLAYGROUND

LOCATION: BOROUGH OF ISLINGTON
SIZE: .42 ACRES

Popular hangout for teens, who were happy to be on the same climbing structures and rubber mounds as the younger kids, with a fountain and stone runnel to collect and direct the water.
Famous for its giant custom treehouses, huge net climbers, and woven willow nests, it was always full of kids and families, with adults sneaking in to play in the early morning hours.
Very popular with young kids, particularly the water play area, which could be used even in the off season, with kids spending hours moving rocks back and forth between catch basins and streams.

LOCATION: BOROUGH OF TOWER HAMLETS
SIZE: 2.1 ACRES
The sand and boulder area is the main focus of the space, an attraction for all ages as kids tried to maneuver their way up and across the boulders; scrambling, climbing and jumping.