

Skateparks

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Overview:

A skatepark is a recreational environment made for skateboarding that is comprised of many different structural attractions, or elements, that skateboarders can interact with in different ways. This case study will dive into how these individual elements are put together to make a good park, why they are put together that way, and how they work together to provide different interactions for the skateboarders and others who use the park. These skatepark elements are organized during the design process of making a skatepark. Once built, they cannot be reorganized since they are usually non-moveable parts. It is important for skateboarders, architects, and engineers to work together when organizing these structural elements, as a successful organization of these elements results in a good park that will be well-used and have many visitors.

What is being organized?

The resources that are being organized are different structural elements of a skatepark which consist of bowls, ramps, and other objects. Based on a catalog of skatepark elements on Ride My Park, there are around 36 common skatepark elements. However, there are constantly new types of structural elements being created, so this list is not exhaustive. Depending on the size of the skatepark, there can be more or fewer elements added to the skatepark. The smallest skatepark can include only one element whereas the largest skatepark located in Guangzhou, China, spans 182,00 square feet, and consists of almost all 36 of these elements. Below, I have created a hierarchy based on elements listed on the Ride My Park website (pictured below).

- Bowl Skating Elements (Interactions: Carving, Speed)
 - Bowl, Snake
- Street and Transition Skating Elements (Interactions: Technical flat-ground tricks, grinds, etc.)
 - Ramps
 - Little launcher, Bank, Mega ramp, Mini ramp, Micro ramp, Quarter, Hips, Roll-in, Wall, Spine
 - Non-Ramp Street Elements
 - Bumps, Cradle, Curbs, Set of bumps, Flat area, Bench, Full pipe, Funbox, Gap, Handrail, Hubba, Jersey Barrier, Manual Pad, Pole jam, Flat rail, Volcano, Pyramid, Ledges, Table, Rainbow, Whoop, Stairs, Euro gap

Bank

Flat launch ramp



Bumps

Different from a volcano which has a flat part



Cradle

Half sphere, usually in a bowl



Funbox

Banks, flats, rails, ledges



Gap

Gap between two elements which can be different



Curbs

An horizontal element to grind



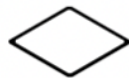
Set of bumps

Set of bumps (2 or more)



Flat area

Fairly large flat area



Little launcher

Small, low thrower for jumping



Hubba

Angled ledge that usually runs down a set of stairs



Bowls

Empty swimming pool



Bench

Bench to sit on and grind



Full pipe

Complete tube element



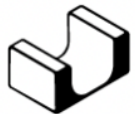
Manual pad

Very low flat area to do manuals



Mega ramp

Large ramp with a vertical section (4M)



Table

Slight rise then identical fall



Rainbow

Element to jump for speed



Euro gap

Wedge ramp (flat section & a step up to the deck)



Stairs

Staircase steps to jump



Spine

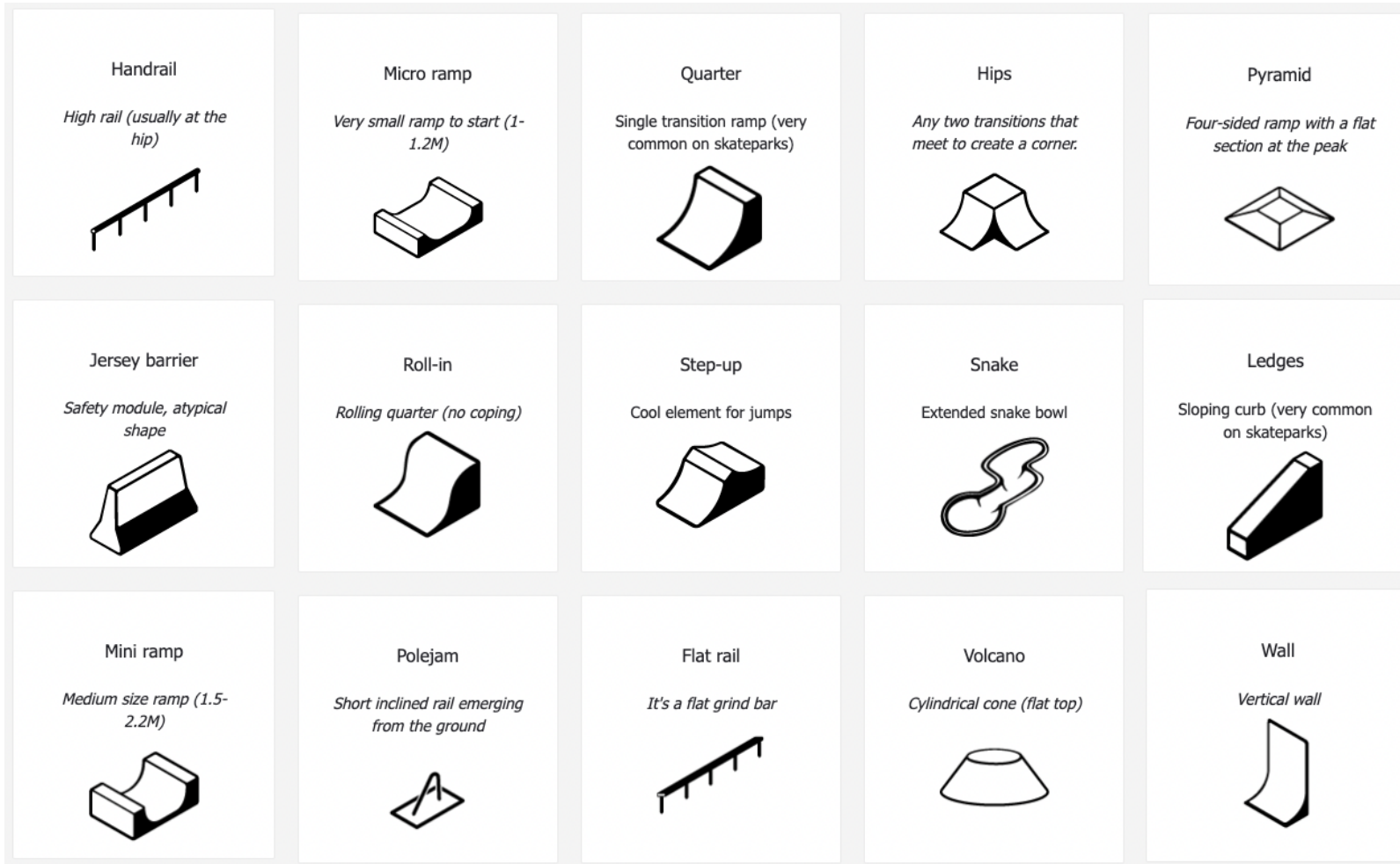
2 quarters back-to-back.



Whoop

Bump





Why is it being organized?

These elements are being organized in order to make a cohesive skatepark that promotes interactions that can serve a large demographic of skaters. The purpose of skateparks is to create a place for people to skateboard, roller skate, or BMX bike for both community and skate competition aspects. Most importantly, skateparks create a safe space for people to skate in which they are less likely to get into trouble or injured.

How much is it being organized?

The organization of the skatepark elements happens a few times throughout the design process of making a skatepark. If the skatepark is rather large, it may take a few iterations and reconfigurations of these skatepark elements until a final design is settled upon. The elements may even be reorganized when building the park itself if there is some major

design flaw that doesn't work from an engineering standpoint, but a good design process should help prevent this from happening.

When is it being organized?

Skatepark elements are being organized when skateparks are first being planned out. This includes the beginning stages of a rough sketch-up to the endpoint in which the actual park gets built. The skateparks themselves are being built in areas in which the community or the city deem as a place that needs a recreational environment such as a skatepark.

How or by whom?

Skatepark design and organization is a collaborative effort between skateboarders, architects, and engineers. It is especially important to get skaters involved in the design process, as they can design off of experience and their experience provides an intuition on how each element will promote certain interactions. It is also important to get the local community involved, as they are the ones who will use the skatepark.

The number of elements being organized really depends on the purpose of the skatepark, whether it is for the surrounding community or for the world stage, as this will also affect the size of the park as well. For smaller skateparks, these will usually be considered a skate spot or a neighborhood skatepark. For competition use, these will usually be regional skateparks which will be much bigger in size and will allow for more skatepark elements to be placed. Ultimately, the size and the purpose of the skatepark will determine how many structural attractions can be added.

When making a skatepark, it is important to make sure to take into consideration different usability and functional concerns (Public Skatepark Development Guide). Below is a list of different considerations and why they are important.

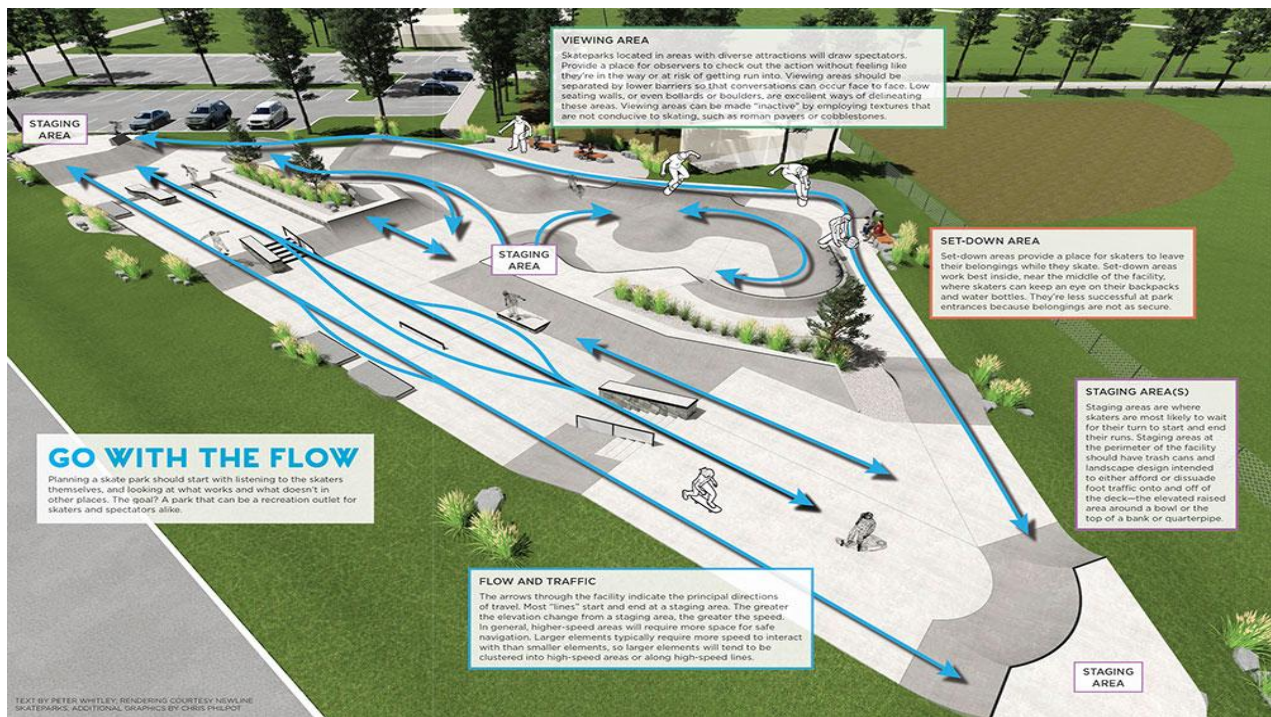
- Usability concerns:
 - Flow: The flow is when you are able to go from one place to another and still keep your speed and momentum, which is what makes the park skatable.
 - Traffic: Taking into account traffic is an important aspect of flow, as it prevents crowding. To mitigate traffic, a designer has to make sure the park breaks down into separate areas people can ride into.
 - Speed: This also relates to keeping the flow of the park, as there need to be areas of elevation to help create momentum and speed so skaters can start at one place in the park and move down a certain path, or line, without having to push.

- Difficulty: It is important that the skatepark captures different people's tastes and skate levels, as that will create the most successful skatepark. A rule of thumb is to design for under 13-year-old skaters and over 33-year-old skaters, as those who are between those ages will skate all levels.
- Visibility (within the skating area): It is important to make sure that the structures allow for skaters to still be able to see where they are going next, as this will prevent injury and people from crashing into each other.
- Stylistic discipline: This relates to difficulty, as different people will want to do different tricks so it is important that the park can cater to as many different styles and needs as possible. Taking a look at the hierarchy of elements on Page 1 gives a sense of what type of interactions and tricks can be done on different elements. For those more interested in doing technical flat-ground tricks, they may like the more street style elements, while those looking to do tricks that involve speed and carving may enjoy the bowl elements.
- Functional concerns:
 - Capacity: It is important to take into account how big the skatepark is as it is important to not overcrowd the space with skatepark elements or else that would reduce the capacity of the park and may lead to crowding.
 - Seating/resting: Designers should designate a seating or resting area on the edge of the skatepark to allow skaters or viewers to sit and rest. Skateboarding is a very physical activity, so it is essential that there is an area for skaters to rest.
 - Access: The skatepark must be accessible to those in the community and easy to reach. This also relates to the accessibility of entering different points of the park, or "drop-in" or starting points. These starting points will usually be marked with an area of elevation and provide as the starting point of the line the skater rides, which follows the flow of the park.
 - Visibility (into and around the park): This is important for the safety of the skateboarders and also allows passersby to watch from a safe distance without being in the way of the skateboarders.
 - Safety and Drainage: This is important in maintaining the park and keeping it safe for the skateboarders to ride.
 - Aesthetic Appeal, Landscaping: This creates a pleasing place for the community to look at and a place the skaters feel is an enjoyable place to go to.
 - Spatial and budgetary constraints/opportunities: This will depend on the purpose and location of the skatepark, as well as who is funding it. These

aspects will affect the size which in turn will affect how many elements can be added to the skatepark.

- Security, Operations, and Maintenance: This is important in terms of maintaining the skatepark and making sure it can last for a long time.

Out of all of these concerns listed, the most important when thinking about organizing the skatepark elements are flow and difficulty/stylistic discipline.



Looking at the “Go with the Flow” figure above, we can apply these different concerns regarding flow and difficulty/stylistic discipline to understand the organizational process of this specific park. In terms of addressing the flow of the park, there are several points of elevation in the park that slopes down, allowing for several starting points that skaters can go from that maintain their momentum as they ride along the park. The different arrows that are drawn on the figure show the potential lines that skaters can ride. This shows that the designer made sure to put ramps on both edges of the park as well as ramps that are spaced out in the middle of the park to allow for better flow since the park is quite large. In addition, because of how spacious the park is, the designer also decided to put both a bowl/snake element (top) as well as several street skating (ramps, stairs, ledges) elements, which maximizes the different difficulty/stylistic disciplines. The street skating elements are organized in a way that is scattered amongst the bottom area that has ramps, allowing for people to easily gain speed before trying a trick on one of these street skating elements. In addition, there are not too many of these street skating elements (i.e. two sets of stairs

instead of more) to make sure there is enough dead space (flat area) for people to skate along which prevents crowding. This ties into aspects of flow and traffic.

The process of designing and organizing these skatepark elements together starts with a rough sketch, usually done by the designer/architects and skateboarders. Then, this will lead to computer drafts and blueprints. The next step would be to make 3D renderings and models. When these models are made, this allows for the collaborating skateboarder and designer to run through potential flows and interaction paths, imagining the lines in the park that skaters could skate and what would work and what would not. The 3D rendering also helps with understanding the aesthetics, textures, colors, and materials of the park and how they will play off of each other.

Where is it being organized?

These skatepark elements are organized in several dimensions, from paper to a computer visual to the actual physical skatepark. In terms of where these skateparks are located, it is important that they are built close to the community that uses the skatepark, either a skateboard ride away or accessible by public transportation. Skateboard parks have had a bad reputation in the past for promoting certain types of unfavorable behavior. However, if cities and communities make sure that skateparks are being organized and built in areas that are accessible, this will help promote a safer and more positive environment.

Conclusion

Overall, there is no systematic way to organize a skatepark necessarily, but rather a set of important guidelines and concerns to go by as highlighted in the "How or By Whom?" section. It is important to take these guidelines into account when creating and organizing a skatepark, as it can help create a successful skatepark that is skatable and used by many. Skateparks are an incredibly important place for skaters, so when it comes to organizing both the elements and locations of the skateparks it is essential to involve the skaters themselves.

References

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