Disney Parks Infrastructure

A Field Guide

Overview

The Disney parks have always had an interesting relationship to infrastructure, but who cares? If you needed to ask, then I have some bad news, because that who is you.

On one level, this relationship is uncomplicated: as attendance increases, the rate of expansion quickens and theme park brands focus their investments on long-term planning, infrastructure will continue to be a major concern for anyone with an interest in the field. Looking beyond the industry, one can see that theming as a practice is not at all limited to entertainment applications. Studying parks, then, gives us a chance to observe it in one of its most concentrated forms, and can be useful in understanding how the practice mutates as it travels into other segments of society. This explanation is reasonable enough, but the scale does draw us away from our point slightly. To begin understanding how infrastructure functions in (and on, and through, and is functioned on by...) the Disney parks, we really need to start at the level of human observation. The relationships between objects, processes, systems and the people that interact with and through them are central to any understanding of how the parks operate both physically and intellectually, and can be surprisingly informative when one knows where and how to look. This guide is intended to help you do just that. While there is no single best approach, the resources offered here should provide some useful starting points for those hoping to explore the web of inputs, outputs and feedbacks that characterizes the resorts' various support systems. But before dashing into anything, of course, a bit of context is in order.

For the Parks, Experiences and Consumer Products division of the Walt Disney Company, infrastructure is simultaneously a mundane requirement and an inspiration. For that reason, it possesses a kind of shifting visibility, particularly at the company's US properties. In attractions such as *Spaceship Earth*, the *Carousel of Progress* and *Autopia* (celebrating communication and information technology, electricity and the interstate highway network, respectively), these systems are given top billing. A less exuberant, though still overt, appreciation can be observed when considering the original design for Orlando's EPCOT Center (in which a functioning city and corporate exhibition complex were planned alongside theme parks and other tourist facilities), and the acts of municipal thaumaturgy required by the Florida resort as a whole. Of course, wherever miracles are being worked, some joyless asshole is usually lurking in the shadows waiting to analyze the situation to within inches of its life. Now, thanks to this guide, you can be that asshole.

Perhaps more than any other major theme park brand, Disney takes great pains to manage the relationship between the public and the systems that support their experiences at the resorts. Knowing this, you can probably guess that most aspects of the company's physical operations are described in terms of wonder. Public discourse that concerns the resorts (news coverage, documentaries and the like) tends to follow a similar thread: an impossible idea is pursued by plucky designers and fabricators who find inspired solutions to absurd problems, then the magical experience they conjure up is handed off to a small army who keeps things running day to day. While creative problem solving and practical know-how are critical components of resort operations, and are without doubt interesting on their own terms, it is a relative rarity to hear any official representative acknowledge that these processes have a reverse direction. To that end, this guide reaches out to those who want to begin tugging at the threads that make up the infrastructural profile of the Disney parks. Of all the groups passing through the gates at the Disney resorts, this project is likely to have the greatest appeal for those whose interest goes beyond leisure (though enjoying one's time on property need not be at odds with its goals). There are no touring strategies or planning tips, and basic knowledge of both the history and operations of the resorts is assumed.

As you may have noticed by now, the best way to begin developing an infrastructural understanding of the Disney parks is to put in some time on the ground. First-hand observation is indispensable to this project, and this guide is meant to direct these observations by highlighting items of low visibility (in more than one sense) and suggesting useful connections between points of interest. Each section is dedicated to a major topic, though these should not be taken as a comprehensive list. The goal of this project is to create a document capable of developing along with the parks, so periodic updates should be expected. Having said that, the sections within this guide represent topics that, at the time of writing, seemed particularly relevant. These were written following site visits (ongoing), and the materials comprising them are based on extensive personal observations made during these trips. Each section opens with a statement of introduction, which offers basic background information on the topic and identifies major concerns. This is followed by a set of analytical questions that vary in intent from basic identification and categorization (What do you see?), to human impact (How do we relate to it?), to theoretical implications (What can we learn from this?). Questions are supported with examples (things and spaces on-property that users can examine in person), and followed by readings that offer theoretical or historical insight into the topic. The guide concludes with a list of general references that offer supplemental information in a variety of formats (documentary, journalism, entertainment, etc). Whether studied beforehand or consulted on-site, this guide promotes explorations that just might serve as starting points for future research projects . . . or, at the very least, it gives you something interesting to think about in the standby line for *Flight of Passage*.

Well, what are you waiting for? Get out there and try not to embarrass us.

Boundaries

It should hopefully be obvious that Disney's resorts, along with those of every other amusement brand to date, exist within and adjacent to physical locations (although there are certainly those who would prefer to somehow escape this plane of existence). These locations are of course variously developed and inhabited, and their specific characteristics will continue to shift as time continues to make fools of us all, but it is more or less a given that a Disney resort's identity depends in no small measure on its position relative to its physical surroundings. Being the first feature that many visitors are likely to encounter when traveling to the House of Mouse, this first section is dedicated to exploring how the Walt Disney Company gets along with its neighbors.

Questions

What mechanism(s) does the resort use to distinguish itself from its physical surroundings?

How does the resort negotiate its relationship to the surrounding area, and how does this vary based on locality?

How is motion between resort areas (or between inside and outside the property) conceived of and coordinated?

Gallery

Figures 1-3:

While examining these aerial views, pay particular attention to differences in both scale and density between the two properties, as well as the drastic change seen by the Anaheim resort between 1962 and the present.

Reading

Foglesong, Richard E. *Married to the Mouse: Walt Disney World and Orlando.* New Haven, CT and London: Yale University Press: 2001.

This work gives an account of the process by which the Orlando resort came into being, and offers some interesting perspective on the negotiations that were required at the city, county and state levels.

Transportation

Few would be surprised at the assertion that both animate and inanimate travelers are moving in large numbers into, out of, and through the Disney properties at any given moment. Similarly underwhelming is the revelation that transportation needs, along with the strategies developed to address them, have changed (and will continue to do so) as the resorts expand physically. Therefore, this section's emphasis is less the scale and complexity of these operations than the implications for those experiencing them.

Questions

What is the resort's relationship to the local/regional transportation system, and how can individual elements (modes, providers, etc) be characterized?

How does transportation shape development within and beyond the resort?

How is movement planned and controlled between and within resort areas, and what are the implications for both visitors and staff?

Gallery

Figures 3-5:

Though it is difficult to do with a small image, pay close attention to the conveyance systems offered between resort areas and their implications. For example: it is not a coincidence that the Contemporary Resort (Figure 5) is among the most costly on property, and also happens to have a monorail line to the Magic Kingdom park passing through its interior.

Reading

Yen, A. M., SRI International, and United States. Urban Mass Transportation Administration. Assessment of the WEDway Peoplemover System at Walt Disney World : Final Report. Washington, D.C.: U.S. Dept. of Transportation, Urban Mass Transportation Administration, 1977.

This is exactly what it sounds like. This very thorough report analyzes the PeopleMover (a driverless transportation system still in place in Tomorrowland at the Magic Kingdom) with reference to every imaginable operational detail. Part of Walt Disney's mass transit fantasy, it is interesting to consider the contrast between this early conception and the system's current operations.

Utilities

Like other topics in this guide, the issue of utilities is often addressed by employees in solidly aesthetic terms that tend reference one of two strategies: concealment (hiding the nuts and bolts to show off the “magic”) or integration (matching the visual theme of a resort area). The goal of this section is to move beyond marveling by considering the direct and indirect attention paid to public services throughout the resorts, as well as the implications of these decisions, with an eye toward the dreaded question of authenticity.

Questions

How are functional utilities systems integrated (or not) into the environment, and does this treatment vary based on specific location?

More broadly, how is the use of material and energy resources addressed in a given space, and how is this connected to our perception of authenticity?

Gallery

Figures 6-8:

Here we have three distinct approaches to the treatment of utilities in a resort space: a functional system incorporated into the physical environment (Figure 6), a nonfunctional system referenced visually (Figure 7) and one functional system made the focus of an attraction while others are presumably hidden from view (Figure 8).

Reading

Hardie, Melissa Jane. “Torque: Dollywood, Pigeon Forge, and Authentic Feeling in the Smoky Mountains.” In *The Themed Space: Locating Culture, Nation, and Self*, edited by Scott A. Lukas, 23-37. London: Lexington Books, 2007.

At this point it is widely acknowledged that the authenticity of a themed environment often has little to do with factual accuracy. Here, Hardie explores what makes “real-life” theming seem real and why that matters.

Marvin, Carolyn. *When Old Technologies Were New: Thinking About Electric Communication in the Late Nineteenth Century*. New York and Oxford: Oxford University Press, 1988.

It is not often that one thinks of the light bulb as a communication medium, but Marvin's history gives us some perspective on how basic utilities (from our perspective) carry surprisingly robust messages.

Attractions and Design

Of the topics discussed here, this is easily the one that has been given the most public attention, and for that reason it also tends to be one of the more difficult sets of relationships to sift through without getting bogged down in razzle-dazzle. While the Imagineering process is often portrayed by staff as a series of quirky and creative solutions to storytelling problems (which, to be fair, is often an accurate description), the focus in this section is the patterns of influence that exist between narrative, conception and fabrication.

Questions

What distinct support systems are present in a given attraction, and what is the relationship between them?

What role is played by operational requirements in the design and fabrication processes?

Gallery

Figures 9-11:

Each of these attractions includes (in the broadest of terms) three distinct systems: conveyance (ride vehicle), housing (environment through which it moves) and show (elements presented for observation). These systems are far from neutral, and each has a significant impact in both aesthetic and narrative terms.

Reading

Brigham, Ann. “Behind-the-Scenes Spaces: Promoting Production in a Landscape of Consumption.” In *The Themed Space: Locating Culture, Nation, and Self*, edited by Scott A. Lukas, 207-223. London: Lexington Books, 2007.

Brigham's account of the Ford Rouge Factory Tour, with references to both Disney and Universal resorts, raises interesting questions about the theming of production spaces (a dying trend at both major resort brands).

Thompson, Emily. “Electroacoustics and Modern Sound, 1900-1933.” In *The Soundscape of Modernity: Architectural Acoustics and the Culture of Listening in America, 1900-1933*, 229-294. Cambridge, MA and London: The MIT Press, 2002.

Here, Thompson explores the relationship between aesthetics, research and construction in the context of theater design during the early days of sound recording.

Crowd Control

Unsurprisingly, Disney gives a great deal of thought to the strategies that manage human movement inside the berm. This is approached in a number of ways; some of them obvious, some less so. Each method is developed for a specific location and a specific purpose, and each has specific implications for those encountering it. This section therefore has the goal of both identifying these techniques and uncovering the intentions behind them, as well as understanding how they structure and pace the visitor experience.

Questions

What mechanisms are used to influence human movement within the resorts, and what do they reveal about expectations for both visitors and staff?

How do mediated waiting experiences (in-queue entertainment, ride reservations, etc) work to manipulate the physical and temporal boundaries of attractions?

Gallery

Figures 12-14:

Here we have some particularly interesting examples of how human motion is influenced within the parks: a variety of physical and visual mechanisms both directs viewer attention and channels traffic (Figure 12), and in-queue activities encourage engagement with the space while extending the attraction experience into the waiting areas (Figures 13 and 14).

Reading

McCarthy, Anna. “Television While You Wait.” In *Ambient Television: Visual Culture and Public Space*, 195-223. Durham, NC and London: Duke University Press, 2001.

In this chapter, McCarthy explores the uses of television in various waiting spaces. Given that most Disney park visitors will spend quite a bit more time in line than in attractions, we are allowed some insight into how the act of waiting, along with its associated behaviors, is both conceptualized and weaponized (there, I said it) by the company.

Gallery

Figure 1
Disneyland Aerial View (1962)
Orange County Archives from Orange County, California, United States of America (https://commons.wikimedia.org/wiki/File:Disneyland_aerial_view,_1962.jpg)

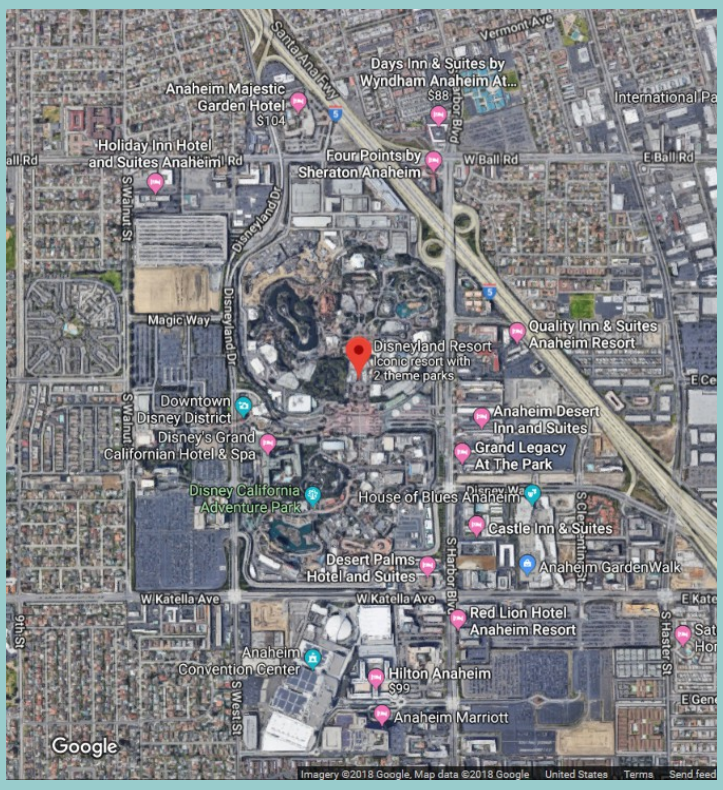

Figure 2
"Disneyland Resort," Google Maps, accessed December 6, 2018, https://www.google.com/maps/place/Disneyland+Resort/@33.810453,-117.9300486,2958m/data=!3m1!1e3!4m53m41s0x80dcd7da84d77583:0x7efd02b2f50ccd51!8m2!3d33.810485!4d-117.918989

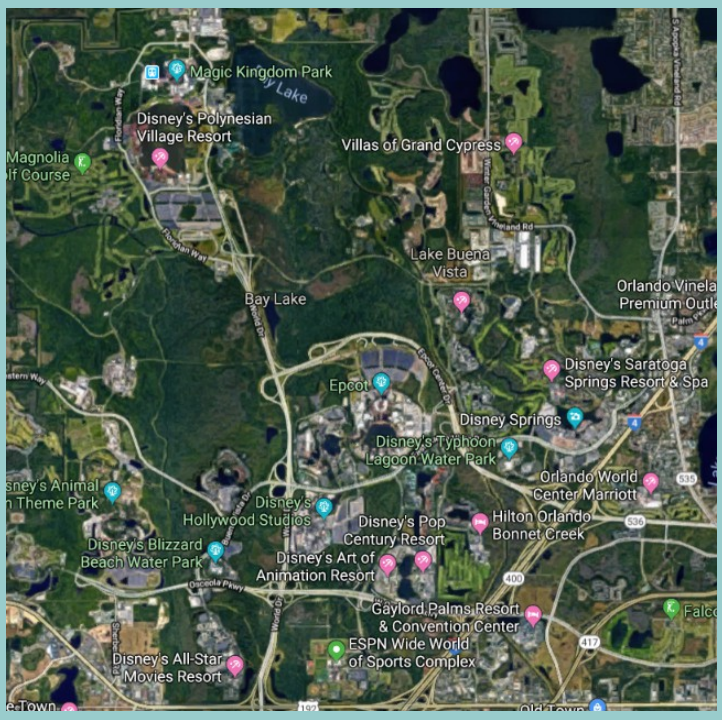

Figure 3
"Walt Disney World Resort," Google Maps, accessed December 6, 2018, https://www.google.com/maps/@28.3790452,-81.5498079,12582m/data=!3m1!1e3

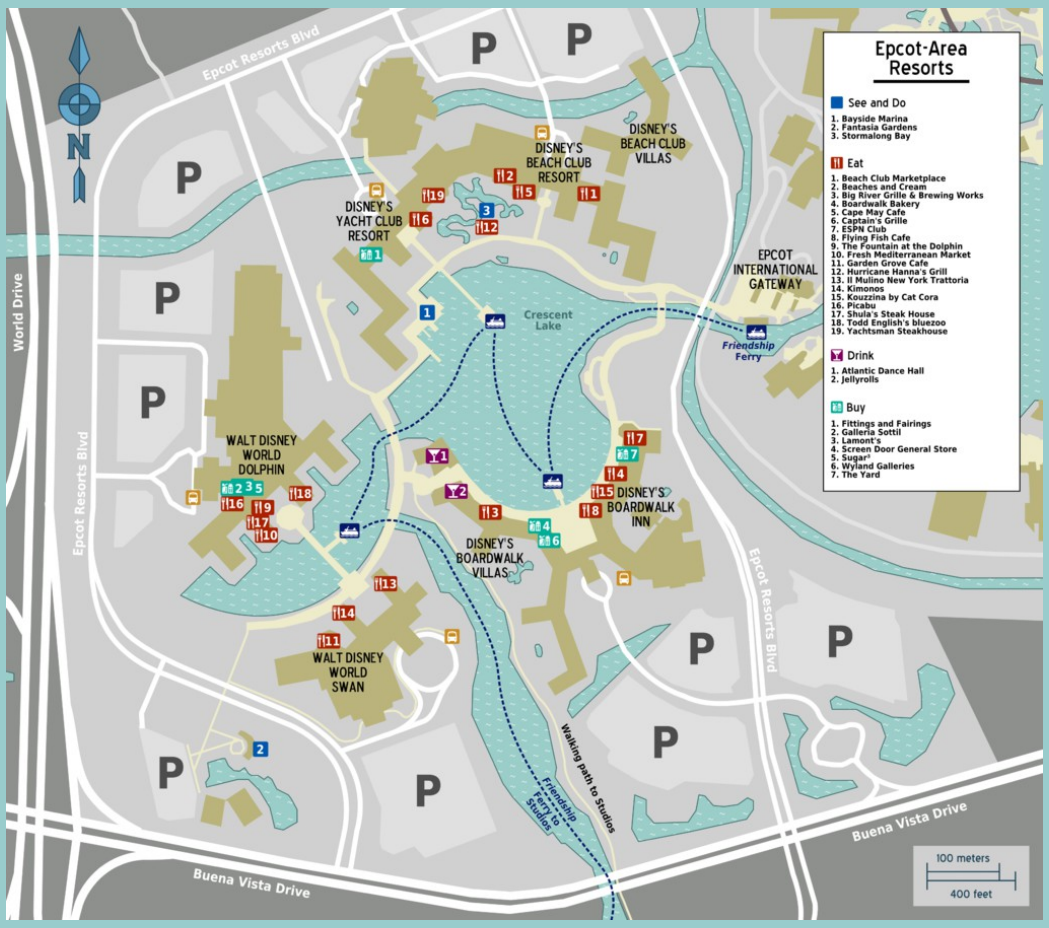

Figure 4
Epcot Resort Area Map (Showing Boat Transit Route) (WT-shared) LtPowers (https://commons.wikimedia.org/wiki/File:Map_-_Walt_Disney_World_-_Epcot_-_resorts.png), https://creativecommons.org/licenses/bysa/4.0/legalcode

Figure 5
Disney's Contemporary Resort
Quarax (https://commons.wikimedia.org/wiki/File:Disney's_Contemporary_Resort_Left.jpg), https://creativecommons.org/licenses/by-sa/4.0/legalcode

Figure 6
Rivers of Light (Viewing Area)
Asia, Disney's Animal Kingdom
Image provided by author.

Figure 7
Sewage Stream (Simulated)
Liberty Square, Magic Kingdom
Image provided by author.

Figure 8
Living With The Land (Greenhouse)
The Land, Epcot
Image provided by author.

Figure 9
Expedition Everest – Legend of the Forbidden Mountain
Asia, Disney's Animal Kingdom
Image provided by author

Figure 10
The Haunted Mansion (Foyer, from Stretching Room)
New Orleans Square, Disneyland Park
Image provided by author.

Figure 11
Living With the Land (Biotechnology Lab)
The Land, Epcot
Image provided by author.

Figure 12
Main corridor
Frontierland, Disneyland Park
Image provided by author.

Figure 13
The Haunted Mansion (Murder Mystery Game)
Liberty Square, Magic Kingdom
Image provided by author.

Figure 14
Guardians of the Galaxy: Mission – Breakout!
("Bi-lingual" Signage)
Hollywood Land, Disney California Adventure
Image provided by author.

Additional Resources
(apologies for any broken links)

Official

Disney Parks (Main Site)
Disney Parks (Blog)

No need to hate. Yes, this is the company position, but we can actually infer quite a bit about how Disney wants the parks to operate by taking a look through these sites. Not much here that addresses infrastructure directly, but still fascinating as hell.

V/Blogs

DIS Unplugged
Rob Plays
TheTimTracker

Theme park blogging is a vast enterprise, and anyone can probably populate this list without trouble. This group offers some variety in terms of content (though not so much in demographics). Here we have first-hand exploration (TheTimTracker), history (Rob Plays) and planning information (DIS Unplugged).

Planning

AllEars

This is one of the classic unofficial guides. Very much oriented toward planning (not surprisingly) on the whole, but they have a little bit of everything. Construction updates are particularly interesting for our purposes.

Documentary

Great Big Beautiful Tomorrow: the Futurism of Walt Disney (CM Films)

An indie-ish documentary that covers some of the technical innovation in a lot of Disney's work up to the 1960s. It more or less holds the company line, but has some great interviews.

Shoot for the Moon (BBC)

A BBC special about the design and construction of *Space Mountain* at Disneyland Paris. A pretty good look at some of the feedback loops baked into attraction design.

Entertainment

Lightship

This company has produced several promotional specials for Disney Parks, most of which can be found online. The website is currently under construction, but still worth a look (spoiler: gross). They call this “Brandertainment,” which is dumber than they want it to sound.