

LEVEL DESIGN GUIDANCE GUIDE

OR: HOW TO LEAD THE PLAYER FORWARD IN YOUR DIGITAL ENVIRONMENT

A FREE E-BOOK BY *MARCUS SVENSSON*
ON DIFFERENT GUIDANCE METHODS IN VIDEO GAME LEVEL DESIGN

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Distribution notice

You are free to share this document/e-book, as long as its form remains intact. It is especially important that all references to the games used as examples remain. It is also important that the links back to my website remain, as I will provide the latest edition of this guide there.

If you have any questions related to this guide, feel free to e-mail me at marcus@perdiv.com

Foreword

Welcome! What you're reading right now is the result of around three and a half weeks worth of research and documentation on guiding the player within your game environment. I conducted this research as part of a course during my last university year, a course which I had the responsibility of shaping as I see fit, in relation to the game design programme I was studying, of course. Herein you'll find several methods for guiding the player forward within your game level, with the use of things like lighting, coloring, sounds and so on.

Let me note right away that I do not possess a degree in anything as of writing this guide and as such, you as a reader should not regard this guide as fact. This guide is merely a compound of my observations and thoughts, so the terminology is not established or industry standard.

However, part of the reason why I chose to format my research in this way is because I found little to no consistent documentation on player guidance in level design. The reason why I'm also distributing this guide for free is because I hope to help aspiring designers to have a clearer point of reference for guidance methods, so by all means, feel free to spread the word! If this guide becomes popular enough, perhaps we can all at least start discussing the possibility of establishing a standardized terminology for the methods within.

I hope you'll enjoy the little bit of help I hope to provide with this guide. If you liked the read, feel free to leave a comment on my website and/or pass the guide around to other people alike. As long as it remains completely intact as is, with links back to my site and complete references to all the games used as examples, I'm happy to see the word spread! I will delay your reading no further, hope it as interesting to read as it was to write!

/ Marcus Svensson

Research conducted and compiled October-November, 2012

<http://www.perdiv.com/>

Introduction – Who is this guide for?

Just as the name of this document suggests, this is a guide for aspiring and professional level designers who want a better point of reference for the many different methods that exist for guiding a player forward within a game world. This is an important aspect of level design, in my opinion, since giving the player a sense of direction and orientation helps eliminate any frustration from not knowing where to go or what to do. From my own gaming experiences, less frustration means I become more immersed in the experience, which in turn I've found further motivates me to become more engaged in what's happening in the game.

The method names are in no way established terminology, but in giving them as descriptive names as I can, I hope that these terms will at least be useful to some people. By referencing back to this guide as to what the definition of the term is, these method names might establish themselves over time. As such, it'll promote discussion of the methods and their definitions, which in turn might lead to clearer definitions and wide-spread terminology.

This guide is for anyone looking for ideas and methods on how to guide the player within a level. It's mainly useful and aimed towards people with an interest in building game worlds, be it a level designer or environment artist. Enjoy the read!

One final note – Possible Spoilers!

For anyone reading this guide, there might be spoilers to the games used as examples. I've tried my best to describe the method's usage as spoiler-free as possible, but in some cases I was forced to mention elements of the story. Read carefully if you're afraid of spoilers and refer to the references-section to see which games are mentioned.

Entry #01: Light the Way

General Description:

“Light the way” refers to the method of drawing attention to the correct or optimal path for the player to take by lighting it up. Of course, this highlighted path could also be one that is out of reach at first, a future path that the player might take later on. This method is especially effective if employed within a generally low-lit environment, or if used in conjunction with complementary colors in the lights. As such, the lighting of the path stands out more in terms of contrast, drawing the players attention.

Function:

As mentioned above, this method works by directing the attention of the player. How is this achieved? Contrast is a key element to this method, be it through brightness or through the color of the light. The players attention is diverted towards the point of interest because of our reflexes, because a bright light at the end of a dark room seems a safer place to be. It grants us a point to orient towards, a point that stands out from the rest.

This method is described, in detail, with several examples in Magnar Jenssen's article *Functional Lighting*¹ on his personal portfolio:

http://magnarj.net/article_funclight.html

Classification: Environmental

The method is classified as environmental, as the highlighting of a path is most often, as found from my research, a purely visual cue used to lead the player forward. It doesn't affect the interaction directly but instead hints towards a path or interactive object.

Samples of Use:



Example 1: This is from an early point in Bioshock (Irrational Games, 2007). The doorways are highlighted to guide the player towards them. Its use in this particular area might appear superfluous, given that both doorways lead to the same point. However, by establishing this particular means of orientation early in the game, the player is familiarized with it from the start. As such, there is less risk of the player losing direction when this method is in use later in the game.



Example 2: Another example from Bioshock. The path to the next objective, behind the player's current view, is obstructed by a locked door. Turning around reveals staircases leading upwards, where a warmer light shines on what looks to be a control panel of sorts. The subtle contrast in the lights' temperature makes it stand out from the otherwise coldly colored lights in the area.

Entry #02: Shadow Warning

General Description:

“Shadow Warning” is a method that signalizes a threat or danger by casting the shadow of said threat in a way that it is clearly visible to the player. This method is especially useful in helping to establish an eerie or threatening atmosphere. Of course, it could also be employed to signalize a goal, perhaps by casting the shadow of an important object that the player is looking for?

Function:

This method works by signaling a danger ahead, often in the player’s path. Accompanying this method with a musical cue that sounds ominous can strengthen the sense of danger and will cause the player to carefully investigate what the threat actually is.

Classification: Environmental/Mechanical

The method combines a bit of both worlds. It is environmental in the sense that it is a visual cue that can, if used correctly, enhance the mood of a scene. It is also mechanical in the sense that it can be used to emphasize danger and promote a cautious approach, perhaps even introduce a new type of foe in a game.

Samples of Use:



Example 1: From Bioshock. By this point in the game, you have become familiar with the Splicer enemies, the infected, mad citizens of Rapture that are bent on destroying anyone who carries the valuable mutagen called ADAM. The large cast shadow ahead, left of the shadow of the pram, captures the typical elements of a female splicer. The masks, the clothes. An ominous musical cue starts by the point you start to approach the splicer and by carefully approaching her, you can emerge victorious from the fight without so much as a scratch.

Entry #03: Objective/Item Highlighting

General Description:

The highlighting of an objective or item is a visual cue used to lead the player towards a usable objective point (often in the form of a control panel or the like) or an obtainable item. Most often this is achieved either by pointing a light towards the object, or by using a visual effect that makes the object glow, or by using both.

Function:

This method draws the players attention by making the object bright, making it stand out visually. It may also be that the object is highlighted through a highly saturated color instead of just a bright, neutral light. Sometimes it is also accompanied by a sound cue that grows stronger as the player approaches the objective. This is the case in *Bioshock*, for example.

Classification: Mechanical

The objective/item highlighting method is mechanical because it is mostly used to draw the player towards an objective or an item, power-up or the like. It is visual in the sense that the highlighting of the object is often graphical, but the use of the object itself is mechanical. A more than common example is a control panel of sorts, glowing brightly. When approached, the player is prompted to use it, opening a door that leads towards the next area. The promotion of interaction with the object and the interaction itself makes it mechanical.

Samples of Use:



Example 1: At this point in Bioshock, the distinguishable bottles that contain new special powers for the player character have been introduced. The purple-ish light of this room can be easily spotted from a distance and when you get closer to the room, you'll see that it contains the aforementioned power-up bottle. Not only is the 'fluids' color within the bottle very saturated, the bottle is also highlighted around the edges with a golden glow.



Example 2: From Mirror's Edge (by DICE, 2008.) Here the player's path is obstructed by a gas leak which, when you approach it, is apparently harmful. Since the gas is emitting from one of the pipes, the player would logically look to them to see if there is a way to stop the gas leak. Lo and behold, there's a conveniently placed, turnable valve that pops with its red hue amongst the otherwise cool colors!

Entry #04: Color Coding

General Description:

Color coding refers to the method of using colors, often very saturated, as a means of showing the player direction. This is most useful if a certain color or array of colors are established as guidance colors in the game's environment. Perhaps the prime example of this is no surprise, you should expect to see a few references to none other than DICE's *Mirror's Edge* from 2008.

Function:

The method works in the same manner that a lot of other visual guidance cues work. It draws the attention of the player, here by sporting a very saturated color, often one of the so called primary colors (see more below) are used. The use of highly saturated colors as attention grabbing works most efficiently if presented within an otherwise de-saturated environment, just as path highlighting works best in an otherwise dark environment.

This method is used so much in *Mirror's Edge* as to becoming part of the core gameplay. The game's senior producer, Owen O'Brien, explains its use very well in an interview from 2008;

*"We wanted to give people a sense of the world very quickly and move through it very quickly. We initially stripped out all of the colors and then just put in red [to guide people to objectives]. But we needed more colors to break it up and also [because] the colors tell you how healthy you are. The brighter they are the healthier you are. When you start to take damage they start to de-saturate. So we needed more colors in the world. But it's a very restricted and deliberate use of strong primary colors and orange."*²

For more information on the concept of primary colors, Wikipedia has more than enough on the topic: http://en.wikipedia.org/wiki/Primary_color

Classification: Environmental/Mechanical

This method works environmentally by highlighting a path that is part of the environment itself. It does not break the architecture of the level by introducing new, unfit elements but instead works in harmony with the architecture by simply coloring it.

This method may also be mechanical, if implemented in a similar fashion as in *Mirror's Edge*. There it serves as a gameplay element, called runner vision, which highlights a good path ahead for the player to take. It's worth to note however that the player may take another path than the one highlighted, but the end goal will always be the same. This feature, runner vision, may also be turned off by the players, as an option to provide more challenge for those who are more familiar with the game's mechanics. If active, the player will notice that the amount of help provided by runner vision is gradually diminishing as the player progresses.

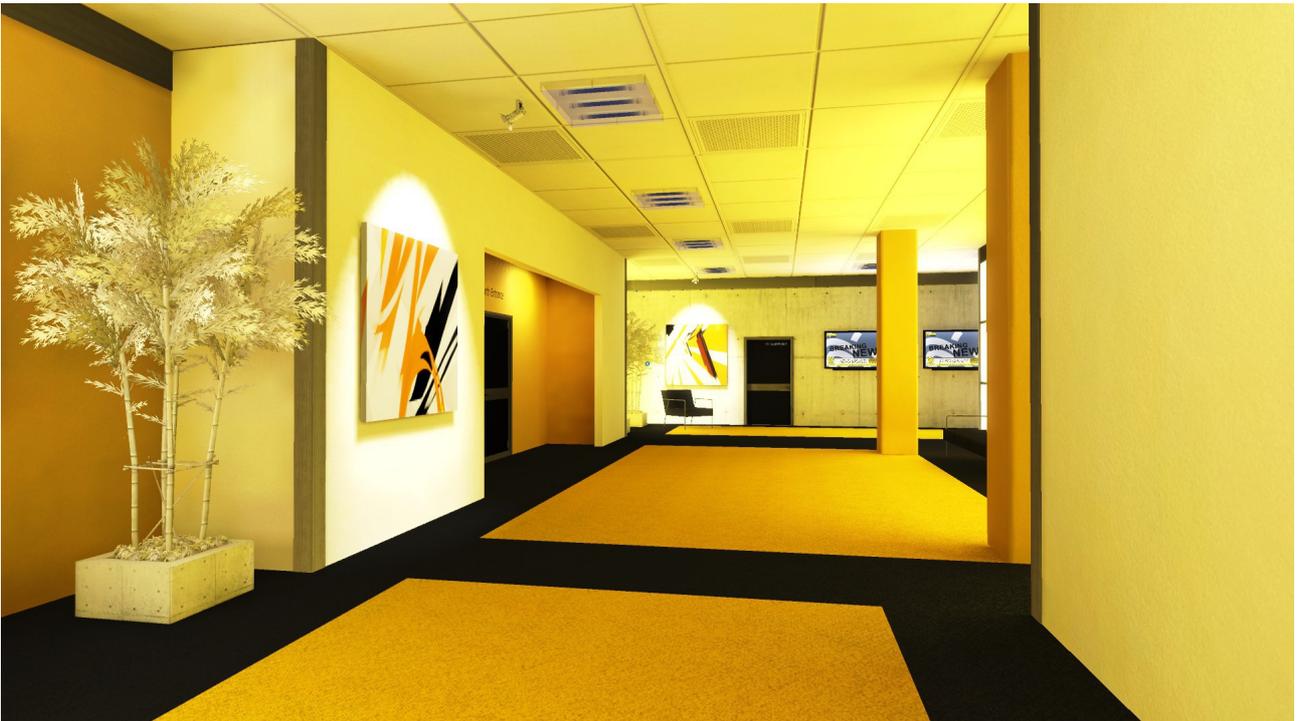
Samples of Use:



Example 1: From *Mirror's Edge*. During the tutorial level of the game, you are introduced to the gameplay element runner vision. What this means is that a path towards your next goal is highlighted by coloring elements red. In fact, the very first hint of this feature in the game is Celeste's (character seen running near the middle of the shot) red shirt. Celeste acts as a guide, demonstrating the different ways to go about the game's unnamed city, while the path she shows you is also highlighted in the same, saturated red color.



Example 2: Again from *Mirror's Edge*. Here the red hue is used more discretely as part of the indoor area, an area less familiar to the game's protagonist Faith, as she prefers to sprint across the rooftops of the city. It still provides guidance, acting as an outline of sorts to accentuate the floor, the path ahead. A dilemma is presented here, where police officers bust out of the door straight ahead, behind the curtains. A quick assessment of the area reveals an alternate path for the player, over the fence to the right.



Example 3: Red is not the sole color used in *Mirror's Edge*. As mentioned before, Faith (the protagonist) is less familiar with the indoor areas of the city. This office complex sports an orange hue instead, but it still serves as guidance, look at how the colored areas of the rug sort of grow towards the more open space!



Example 4: From *Borderlands 2* (Gearbox Software, 2012.) The three barrels at the left are colored in distinct colors, respective to the elements that they represent. From left to right, incendiary (fire), corrosive (acid) and explosive (kaboom.) Because of their colors and bright 'labels' in the middle, they're easy to spot from a distance. The loot chests/boxes/mailboxes/trash dumpsters etc in *Borderlands 2* also have a discrete color coding. Most lootable containers have bright green lights on them, as seen on the chest at the far right in the picture. These lights turn off as you open the containers.

Entry #05: Landmark as Destination/Foreshadowing

General Description:

Before getting into details on the level design guidance method of using landmarks, let's look at the word's definition, as described by Cambridge Dictionaries Online;

“Landmark - a building or place that is easily recognized, especially one which you can use to judge where you are” - http://dictionary.cambridge.org/dictionary/british/landmark_1

With that in mind, the method itself uses a landmark, per the definition above, as a means of orientation towards a goal. It might be a future destination located far away from the player's position, hence the foreshadowing part of the name, or it may already be in proximity but not immediately accessible. I will discuss both aforementioned variations in the examples below.

Function:

Landmarks work in the same way they work in real life. A signature building that is easily recognizable is placed at a point in the game world. Either it's placed where it can be used to establish direction towards it, if it is in proximity, let's say the equivalent of a couple of blocks away. If it's instead placed far away from the player, it may be used as a foreshadowing element, a figure of a destination to come. Through this way it may also establish the scale of the game world, how far you've come and how far you have yet to go to reach that final destination.

Classification: Environmental

Landmarks are perhaps one of the prime examples of effective environmental methods for player guidance. It may be argued that since the player uses them to find a path ahead, working their way towards the landmark itself, it may seem mechanical in a way. However, I think that unless the landmark itself provides the player with an immediate means of guidance, it acts only as guide in a discrete manner, so to say. Thus, the classification is environmental.

Samples of Use:



Example 1: From *Mirror's Edge*. The protagonist, Faith, must reach her sister in the RP&A-building. Already at the start of the mission, the building, seen towering in the middle of the picture, is presented via a short cutscene. From thereon, it acts as a landmark and a means of orientation for the player. How do I reach the building through the already established parkour-like style of play?



Example 2: From *Half-Life 2* (by Valve, 2004). The Citadel, the blue-ish, metallic monolith towering in the middle of the shot, becomes an established landmark early on in the game. After becoming familiarized with the resistance movement of the game's story, it is revealed that the Citadel is the headquarters of the oppressive Combine operation. As such, it becomes a symbol for the Combine, the 'bad guys', and the final destination for our hero bent on freeing humanity from oppression.

Entry #06: The Door is Open

General Description:

“The door is open” is perhaps one of the simplest methods mentioned in this guide. Just as the name implies, it refers to the simple practice of leaving the desired path for the player wide-open. This can be employed in a number of ways, through an empty doorway (no door), through a partially open door or through a fully unobstructed doorway (open doorway w/ door.) If used in conjunction with methods such as lighting the path, it'll be even clearer to the player where to go.

Function:

As so many other methods, this one more or less requires the establishment of a contrast, a broken pattern to signify the path. If all other doors are closed and locked whilst one stands wide open, it becomes a pattern-breaker. Naturally, in such a locked down and closed environment, our attention is drawn towards the odd one out. Especially so if the doorway of the opened door has a bright light shining from it, or something similar.

Classification: Environmental

As a purely visual cue for leading the player towards the path, the open door method is classified as environmental.

Samples of Use:



Example 1: From the Half-Life 2 mod The Stanley Parable. A lot of the rooms and corridors in this narrative driven mod are presented in a similar manner to the one above. There are a lot of doors, even windows into some rooms behind locked doors, to give a sense of the complex being bigger than just the area you can traverse. The only areas that you actually can get into are bordered with open doors.



Example 2: From the beginning of Bioshock. The large, spherical chamber seen in the shot is the Bathysphere, the only means of transportation down to the underwater city of Rapture. The designers could've left the door closed for the players to open it by themselves. By keeping the door open and letting a warm light shine inside the sphere, it seems a bit more welcoming. It also makes it look like the sphere's been used quite recently, hinting that someone has either gone to or fled from Rapture not too long ago.

Entry #07: Arrows and Signs

General Description:

About as simple and obvious as guidance methods go, arrows and signs usually point directly towards an objective or the path leading to it. It can be anything from a traffic sign in the game world to a compass in the HUD.

Function:

Arrows and signs are easy to understand since they're part of our everyday life (real life, that is.) We're familiar with how they communicate possible destinations, so when incorporated into a game world, we don't need any tutorial or the like to understand what these signs and arrows tell us. The imagery of them is very easy to understand and we're familiarized with it at an early age.

Classification: Environmental/Mechanical

Arrows and signs may be incorporated into the game world itself, as part of the environment. In this sense, they're environmental, but they may also be mechanical, in more than one way. The signs that point towards your destination are mechanical in the sense that they act as guidance for you to get to your goal. They may also be mechanical in another way, if they're part of the HUD, like a compass or an arrow pointing towards your destination relative to the direction you're facing.

Samples of Use:



Example 1: From Bioshock. Here you can see both of the aforementioned variations. There's the neon sign with the arrow pointing downstairs and also the golden arrow at the top of the HUD, which always points towards your destination. While the area downstairs is not your immediate destination, this presents the player with a choice to explore another area before heading forward.



Example 2: From Borderlands 2. Every area transition (basically where the game needs to load in a new environment/area) is bordered by a wall such as the one seen above. The purpose of these 'travel walls' is very clear, since the destination area is named, the wall is for most part made up of an arrow and there's an interaction icon in the middle.

Entry #08: Subtle Arrows

General Description:

Subtle arrows are like regular arrows. They point towards a direction or a point, but instead of being blatantly obvious (i. e. being shaped like an actual arrow), subtle arrows take the shape of something else pointing towards the goal.

Function:

Subtle arrows work in the same way as normal arrows do, except the shape of them are different, more discrete. They lead you in the direction towards which you should walk by pointing at it or towards it.

Classification: Environmental/Mechanical

The method is environmental because the subtle arrows are integrated into the game world in a visual manner. This can be something like an icon, graffiti or a billboard that indicate where to go. It doesn't alter the gameplay, it simply leads you in a direction.

The method can also be mechanical, however, if employed in a way that it helps players solve puzzles or the like. This is the case in *Portal 2*, for example, where dotted lines are used to indicate connections between elements in the level. You can read more about how it's used in the examples below.

Samples of Use:



Example 1: From Bioshock. The staircase leading up to the Gatherer's Garden vending machine, where you acquire your first special power, a so called plasmid. Not only does the neon sign fit well into the art deco style, it also points up the stairs, to indicate that there is something special waiting for you up there.



Example 2: From Portal 2 (Valve Software, 2011.) The dotted lines are used to indicate connections between different elements in the level. In this example, the line connects from the laser receiver to the door, meaning that when a laser beam hits the receiver, the door is opened.

Entry #09: Skill Impasse

General Description:

Imagine this scenario, you're playing a game that relies a lot on powers or skills of sorts, perhaps of elemental types. There's a door or path ahead that looks intriguing, but it is blocked off by an intense fire. You think to yourself, "I probably need a water power to get past this fire!" That's what skill impasse is about, a path blocked off with the need to use a special skill or power-up to get past the obstacle.

Function:

Skill impasse demands a few prerequisites. For the method to be usable at all, the game needs skills/powers. These powers should also have opposites. One of the most common setup of powers is of the elemental kind. Fire melts ice, water puts out fire, etc.

The reason why elemental powers are a popular setup is because we're familiar with the rules before we even start the game. The pedagogy is simple and established, we know from real life experiences that heat melts ice, for example. So long as these elements are presented in a way that they're easily recognizable, you probably won't even have to tell the player to use the fire weapon to melt away the ice in front of the next path.

Classification: Mechanical

Skill impasse is a mechanical method because it requires an understanding of the game's rules in order to progress. You need to know what power to use to get rid of the obstacle, be it one that you already have or one that you need to get. Usually the player is also rewarded for paying attention to the ruleset, as side paths containing upgrades, ammunition or the like may be obstructed by a skill impasse.

Samples of Use:



Example 1: From Bioshock. As can be seen on the left side of the picture, the Twilight Fields-area is blocked off by a large chunk of ice. At this point, the player has already received the electric bolt power, so it's safe to assume that there's a fire ability for taking care of the ice. As the inaccessible path is intriguing, the player is drawn towards the Eternal Flame crematorium. Surely there's a fire power there?

Entry #10: Map/Mini-Map

General Description:

Though usually not incorporated in the actual level design, using maps and/or mini-maps is a popular method for more open-world type games. These are most often accessed through an in-game menu for normal maps and through a HUD-element for the mini-maps. It is a very efficient method for game worlds with multiple paths, as it gives the player an overview of the area, making it easier to navigate.

Function:

Maps have the advantage that they work pretty much out of the box, as maps have been a crucial element for navigation in the real world for a very long time. We're taught during the early years of school how to use maps. The concept is simple, provide an overhead view of the environment and let the player know at which position they are and what direction they're currently facing. From there, it's easy to expand upon the map's language, the map legend, by placing icons representative of objectives, places, points of interest, etc. Just don't forget to tell the player what the icons represent!

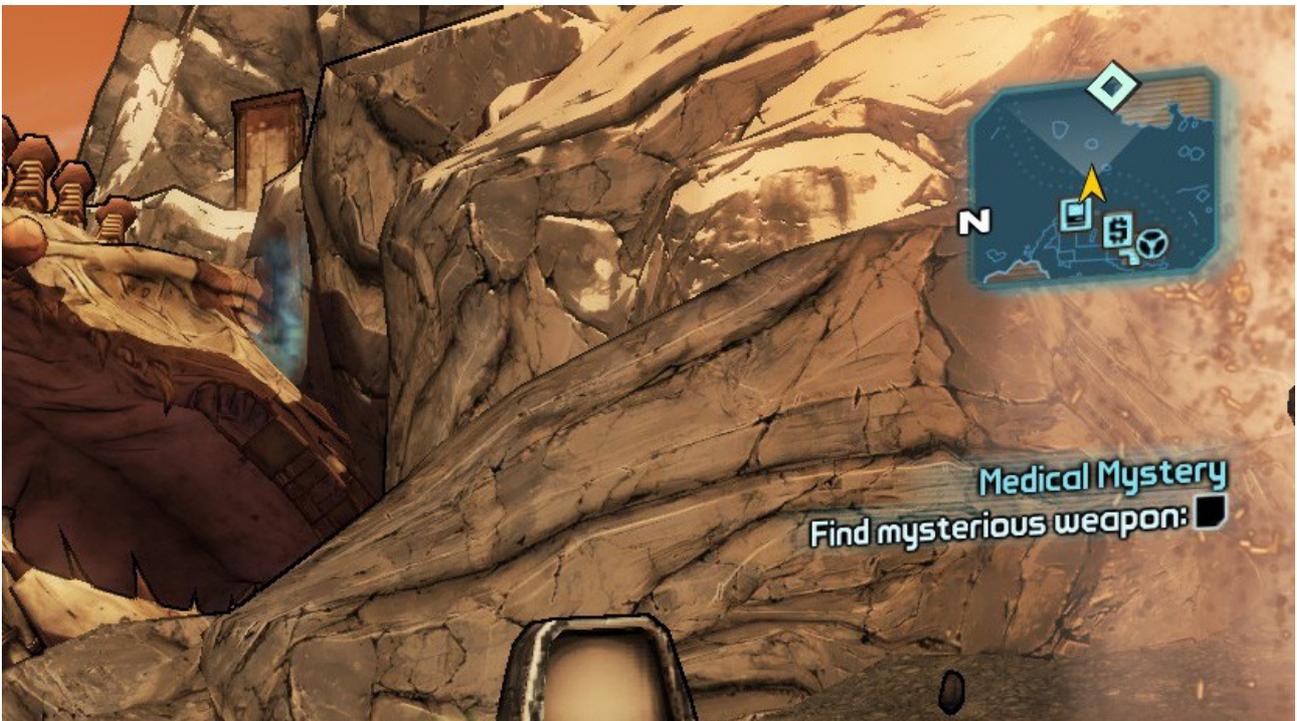
Classification: Mechanical

Maps are mechanical since they're most often separate from the environment itself. They also provide the player with specific instructions on where and what different locations in the world are. Sometimes they even present you with path lines towards your goal, making it even easier to know where to go.

Samples of Use:



Example 1: From Borderlands 2. The full view of the in-game map can be seen here, complete with icons for different points of interest, including waypoints for the current objective (the diamond shape slightly below the middle of the screenshot.) The overhead view is simple and clear, outlining the borders, paths and elements of the environment.



Example 2: Here's a zoomed in picture of Borderlands 2, with the mini-map in the top-right corner. It's the main means of orientation through the world, providing you with a quick overview of where you currently are. Just as the larger map, the mini-map provides you with icons for mission objectives (the diamond) and for different points of interest, like vending machines and vehicle deployment spots.

Entry #11: Floating Waypoints

General Description:

Floating waypoints are the small icons that point towards an objective and are always rendered on top of the environment, so that the player can see them all the time. These waypoints are very helpful in game environments of a more open nature, allowing the player to always have a point to move towards when headed for the objective. These waypoints are often accompanied by a number, the player's distance from the objective, in metres. In some cases, it may not be a fixed waypoint but one that leads you along the path towards the objective as well.

Function:

Floating waypoints work because they are always visible (rendered on top of the game environment) and are always positioned on the screen relative to where the objective is. If the shape and paths of the environment are very complex, it may be hard to navigate towards the objective even with the aid of the waypoints. As mentioned above however, this problem is often solved by having the waypoint move in steps towards the actual objective. Instead of pointing directly towards the tower a kilometre away, it may first point to the street that leads towards the tower or the like.

Classification: Mechanical

Like the maps and mini-maps, the waypoints are most often not part of the environment itself but instead an element of the HUD and in that sense mechanical. The waypoints are a direct means of guidance towards a point, often measuring distance towards it as well.

Samples of Use:



Example 1: From Dishonored (Arkane Studios, 2012.) As can be seen near the crosshair in the middle, there's a waypoint pointing towards an objective, with convenient naming and distance measured. It makes navigating the cramped city of Dunwall a lot easier. At the very right side of the screen, you can also see an arrow pointing right, towards another objective. The shape pointing right means that the objective is currently outside of the screen space.

Entry #12: Stock Up!

General Description:

This method is one that is mostly typical to combat oriented games, such as shooters or the like. You walk into a room that's piled up with ammo for your weapons. You know that there's a showdown up and coming when there's an abundance of ammunition. There's an eerie silence going through the room full of bullets and health kits. The calm before the storm!

Function:

If a shooter, the most common premise for this method, is well balanced in its gameplay, you are often just given as much ammo as you need to get by. When you then come to a room that's riddled with ammo of different types, you sense that there's a greater battle coming up. By also establishing a quiet mood for the players (having no enemies in the ammo room), they're given a moment of preparation before the big battle.

Classification: Mechanical

The method is mechanical, since it helps the player get stocked up with enough ammo and/or health to get through the forthcoming battle.

Samples of Use:



Example 1: From Wolfenstein 3D (id Software, 1992). In the boss level of the third episode of the game, you've finally reached the floor where Hitler himself resides. The ominous boss theme starts and the screen fades in to the first room, where you're given a mini gun and a slew of ammo immediately. Things are about to get serious!



Example 2: From Half-Life 2: Lost Coast. At the end of this short one-mission DLC, you arrive at a balcony or working platform of sorts. There, the first things you happen upon are these. A medkit, a rocket launcher and a box full of spare ammo for the rocket launcher. As soon as you walk up to pick it all up, a combine helicopter shows up. The final battle of the mission begins!

Entry #13: One Threat at a Time

General Description:

A game's difficulty level needs a bit of ramping up in order to not completely overwhelm the player. This applies to the game in general, but also in a per-stage fashion if the game is laid out in such a way. You want the player to have some control of the situation, even if it's supposed to be difficult. That's where this method could come in. By introducing one threat at a time (an enemy, trap or the like) and letting the player learn how these threats work, you can then present the threats together in a later stage in the level/game.

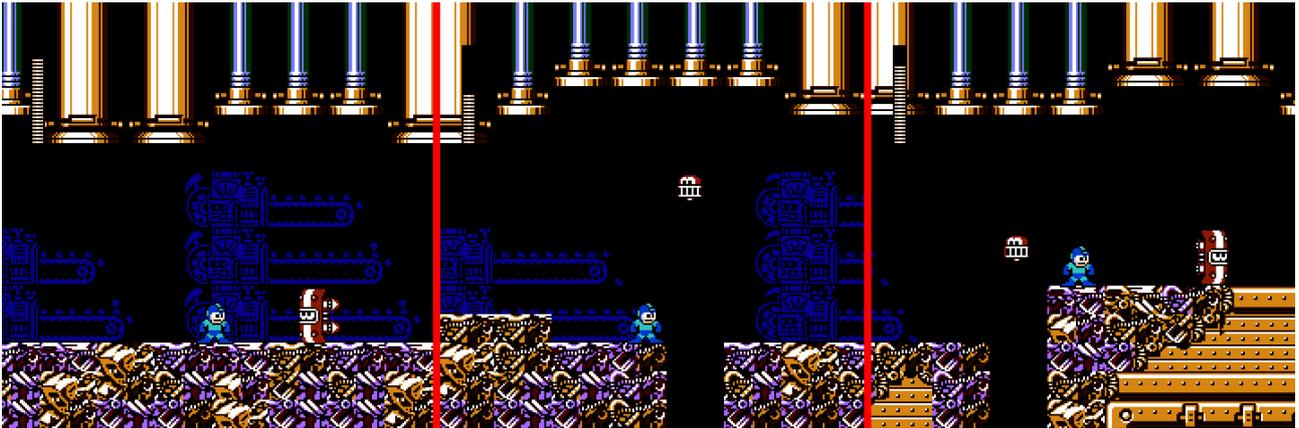
Function:

If employed in a way similar to how it's described above, the method will provide a good incremental increase in the difficulty. If the threats are presented separately first and then together, the player should still feel in control enough of the situation, as they've already 'gotten to learn' the threats alone beforehand.

Classification: Mechanical

As this method is very closely related to the difficulty, an element of the mechanics and gameplay, the method itself is also mechanical.

Samples of Use:



Example 1: From Mega Man 4 (Capcom, 1991.) At the beginning of Dust Man's stage (one of the bosses), you encounter the shield enemy, pictured at the leftmost screenshot. Its pattern is quite simple, it flies a short distance and then turns around to fly back in the opposite direction. The only way to harm the shield enemy is by shooting the side with the boosters, as the shield side of it deflects Mega Man's shots. A little ways along later, you come to a 'pit of death' that you can fall into, seen in the middle shot. Not only that, but there's also an enemy that flies up from the bottom when you get close and descends after it reaches the roof. These little buggers are quite good at surprising you at first, knocking you down into the bottomless pit that they came from. Further on, as seen in the rightmost screenshot, you're faced with both these threats at the same time. At this point you've learned their individual patterns, now it's up to you and your reflexes to avoid them both!

Entry #14: All Roads

General Description:

This is a method that should be familiar to most everyone out there. It involves the rather simple approach of presenting paths to a player, most often within a city/town, through the use of, you guessed it; roads! It might seem obvious, but it's worth documenting as a town in a game without roads becomes harder to navigate and less believable. Roads may be presented in forms other than asphalt or cobblestone. For instance, a paved road in a natural cave might appear a bit odd. Instead, the paths in this case could be outlined by small streams or rivers.

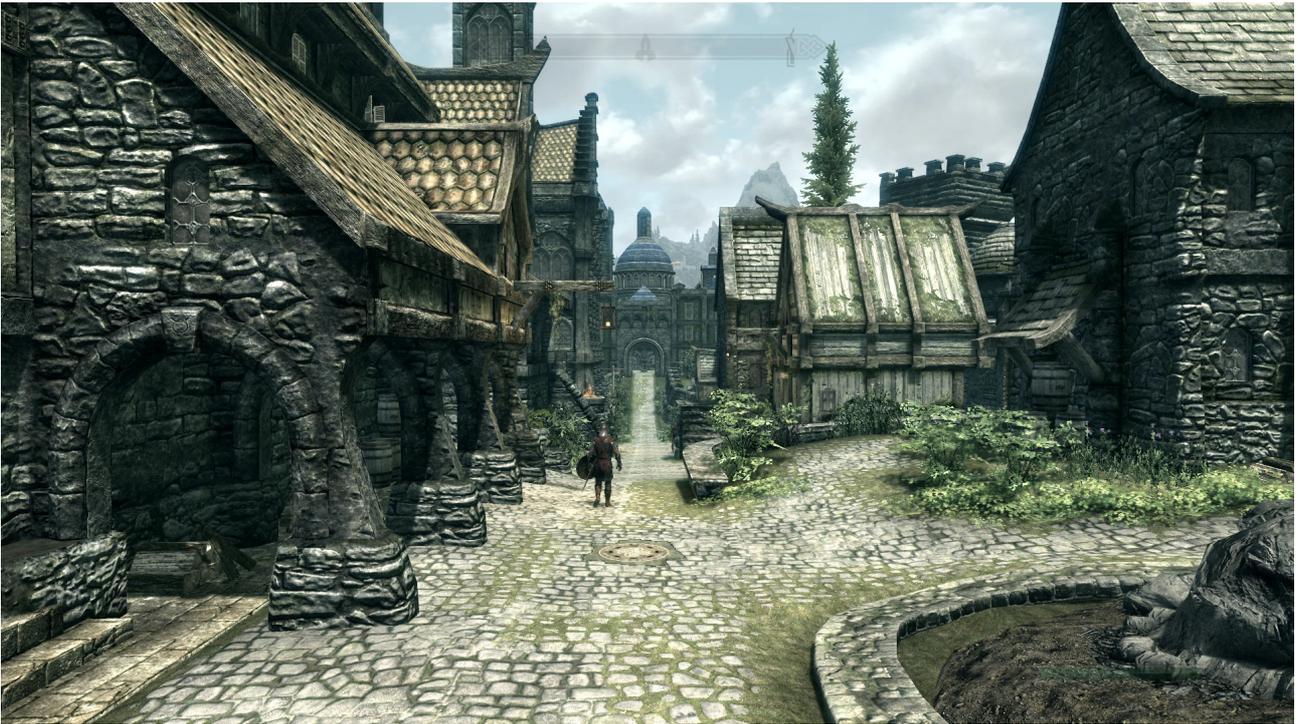
Function:

Roads, just as in real life, mark the paths that you can traverse. In an open-world game this makes things a lot simpler for the player especially, since open-world games tend to have very large scale worlds. The main prerequisite for roads and paths is that they should preferably be distinguishable from the rest of the nature, so that the player may spot them easily.

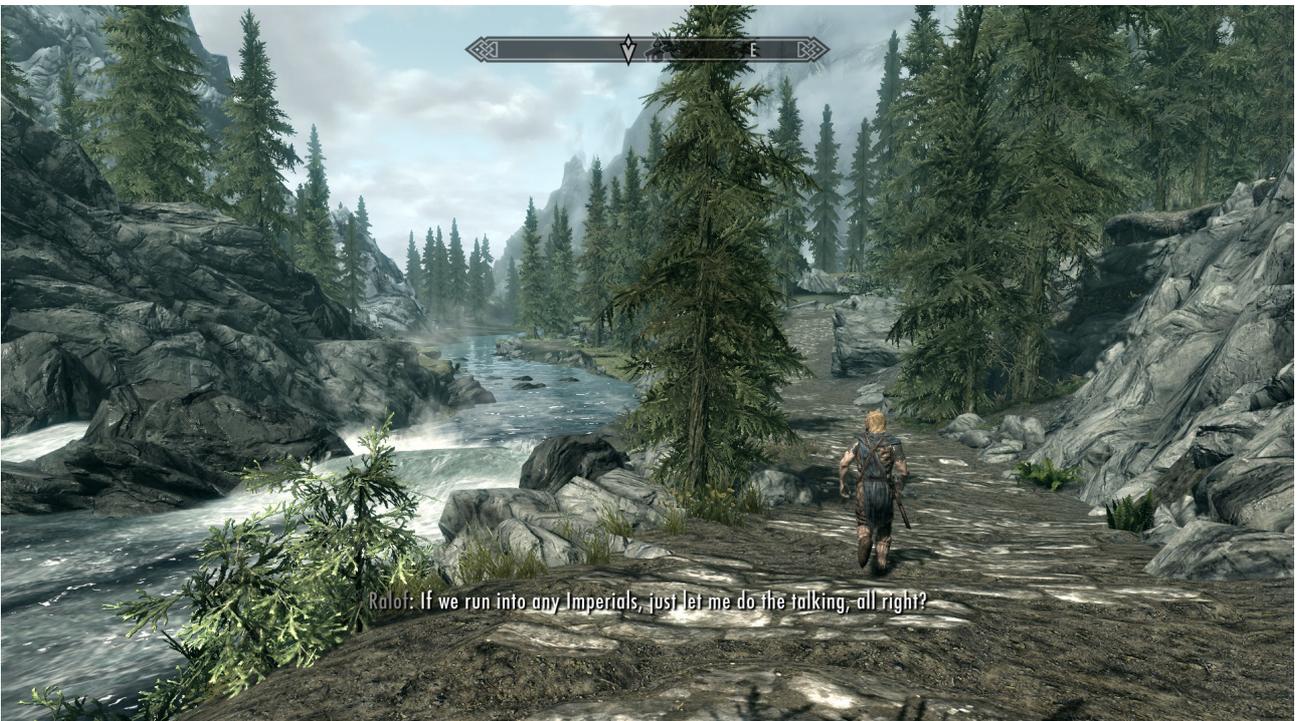
Classification: Environmental

Roads are part of the environment itself and are there to enhance and/or to make clearer where the player can or should traverse. Other than leading the player, they also provide a nice visual framing of sorts for cities and towns. A town without any roads around the buildings might just look like a random clutter of buildings. Add some paths leading between the buildings and it'll look a lot more like an actual town.

Samples of Use:



Example 1: From The Elder Scrolls V: Skyrim (Bethesda Game Studios, 2011.) One of the many towns of varying sizes from the game. The cobblestone roads here perfectly demonstrate how the roads provide a greater sense of orientation and add to the impression. Just imagine the town without the roads. It'd look quite weird, wouldn't it?



Example: From TESV: Skyrim. Rivers and streams are used to a great extent as added guidance in the outdoors, but also inside some dungeons. I didn't have a good shot of it used in one of the game's many dungeons, unfortunately. This shot demonstrates its use alongside roads though. Not only does it add to the sense of orientation, but it also makes the path a lot more visually interesting and less boring to traverse.

References

Books and Articles:

¹: Portfolio of Magnar Jenssen

Magnarj.net (2006) Portfolio of Magnar Jenssen. [online] Available at: http://magnarj.net/article_funclight.html [Accessed: 19 Oct 2012]

²: EA Discusses 'Mirror's Edge' Sickness Concerns, Lack Of Color Green

(2008) Interviewed by Stephen Totilo. (<http://multiplayerblog.mtv.com/2008/03/07/ea-discusses-mirrors-edge-sickness-concerns-lack-of-color-green>) [Accessed: 19 Oct 2012]

Referenced Games:

Bioshock, Copyright © Irrational Games, 2007.

Mirror's Edge, Copyright © DICE, 2008.

Borderlands 2, Copyright © Gearbox Software, 2012.

Half-Life 2 and *Half-Life 2: Lost Coast*, Copyright © Valve Software, 2004.

The Stanley Parable, Copyright © Galactic Cafe/Davey Wreden, 2011.

Portal 2, Copyright © Valve Software, 2011.

Dishonored, Copyright © Arkane Studios, 2012.

Wolfenstein 3D, Copyright © id Software, 1992.

Mega Man 4, Copyright © Capcom, 1991.

The Elder Scrolls V: Skyrim, Copyright © Bethesda Game Studios, 2011.

Further Reading:

During the time which I spent on this guide as part of my uni education, I wrote a few side articles on or related to the matter. Links to these will follow below.

[Side Note - On 2001: A Space Odyssey and Directing Attention](#) - A short post on how the aforementioned film directs the attention of the viewer and how this is related to guidance methods in level design.

[Side Note: With a Little Help From Science](#) - A post that discusses existing scientific research on the brain's reaction temporally regular and irregular visual patterns. I discuss how this reaction might be related to how the more visual guidance methods work to direct our attention.

[All related posts on my site](#) - For those interested in reading more about the process.