

Whole Answer

You explained your concept and the visual aspect of the arena, but you haven't, that I've seen (I could have easily missed it), explained how the level is actually constructed or composed.

Is it top-down? Isometric? Side scrolling? Adventure game mapped? How is the 2D environment accessible to the player through the avatar?

What are the interactable capabilities of the avatar? Walking, probably running, sure. Is jumping possible? Is climbing? Is hiding a direct interface interaction or a circumstantial dynamic where players just position themselves behind things using basic movement?

Avatar capability and gameworld accessibility come together within a dynamical system to form a perceptible ecology of possibility. The nature of that ecology takes its shape in the form of a sort of avatar-gameworld-relationship. Through this relationship—by evaluating the potential of the environment based on avatar capabilities for movement and access—we make perceptual judgements, like determining if an outcrop is a *wall* or a *ledge* based on its relatibility to avatar jump height capability, or if trees are *decorations* or *locations* based on the avatar's capability for climbing/ascending. What the gameworld *even is*, with respect to how it's utilized by a player, is defined by this relationship. In the parlance of [ecological psychology](#) and [embodied cognition](#), these accessibility/evaluative relationships between avatar and environment are called *affordances*.

———an aside———

An unfortunate convention in mainstream game design is to use the word “affordances” in the inverted sense presented by Don Norman in his book *The Design of Everyday Things*. Game Designers cite this book, in reference to this inverted presentation of affordances, in talks and books somewhat often. Norman was borrowing the term from ecological psychology, but inverted its meaning to help prosaically orient his perspective on design. In the *inverted* use, “affordances” are, more or less, signals to a human user regarding the intended functionality of an interface or object. While that inversion may seem intuitively applicable to video game design, it actually ends up unnecessarily and unhelpfully constraining epistemic understanding of environment, interaction, and play (in my opinion).

It's from this inversion of affordances that infamous concepts like “yellow handholds/ladders” arise.

In its original context, an affordance isn't *communicated* through an object based on designed form or color; rather, an affordance is *derived* from the environment based on an organism's embodied awareness. In other words, a chair of a particular size doesn't outright communicate its singular function as a seat; rather, a chair of a particular size in relation to my awareness of my body *affords* sitting on, standing on, pushing or dragging from one place to another, possibly

even crawling under or hiding behind. In simplest terms, affordances in original context are derived from the environment by an organism through embodied perception, not communicated through signals and symbols in and of intended design.

———aside over———

From this perspective, it's impossible to design the gameworld and the avatar's capabilities in independent silos; they're *one thing*. They have to be designed as one system. A system of movement, a system of accessibility, and a system of perception, but one inseparable system all the same.

Consider, though, that affordances aren't derived arbitrarily. Affordances arise from circumstantial context just as much as they do from embodied perception.

Most of the time I walk into a room containing a chair, I perceive the chair as "sit-on-able," since that's its most typical recurrent function and it's the most convenient thing it can do for my human body. However, if a high lightbulb burns out, that same chair may now be perceived as "stand-on-able," if the seat is within a certain height in relation to my physiological ability to step up. If debris is flying through the room, that same chair may now be perceived as "hide-behind-able," if the back of the chair is within a certain width in relation to my proprioceptual understanding of my own width. Objects are generally perceived as affording the utility they do based on embodied perception *and* the context of the current situation.

As an example of why I'm talking about any of this, consider just a tree. Nothing I mention here has to explicitly exist in your game, I'm just framing what I'm talking about.

Just from a single tree:

- If there's an embodied mechanic in which being above a certain strata level allows a player to see where all other characters are on the world map, like a situational enemy mini map of sorts, then players are more likely to perceive a tree as "climb-up-able," and give doing so a try, whether or not it's possible in the game to climb trees specifically.
- If there's an embodied mechanic of "cone of sight," displaying where the player can see, and objects obstruct this cone of sight, the player is more likely to perceive a tree as "hide-behind-able" based on their avatar's embodied experience with how sight works.
- If there's a mechanic where tree hollows can be used to stash items and gear, the player is more likely to perceive trees with visible hollows as "item-contain-able."

In these cases, single trees afford several different modes of interactivity based on avatar capability and situational context.

Extrapolating these concepts to an entire forest, with consideration for avatar capability, you can start to conceptualize a whole range of functionality and purpose within your game's ecological system (avatar-gameworld-relationship).

Provide the avatar with functionality that will enable the player to perceptually derive affordances from the environment that make traversing the entire space meaningful.

For instance, if all climbing trees does for me is give me a place to hide, but I can also hide *behind* trees, and with more versatile mobility, I may never even perceive the affordance of “climb-*up*-able,” since the outcome I’d get from that relationship is already afforded to me more efficiently when trees are just “hide-*behind*-able.” Or, if there are only useful items in the center of the map, I may not even cognitively consider the afforded ability to traverse any other direction but toward the center—going elsewhere serves no contextual purpose; but if I know I have the ability to uncover stashes hidden in trees and under rocks, even if more randomly and scarcely, my perception of all afforded traversal directions arises more consciously.

TL;DR

Consider the function of the environment in conjunction with the embodied mechanical abilities of the avatar. Design them as one system, not two independent components of the game. Give the player access to abilities, through the avatar, that render the gameworld flexible, versatile, and valuable. Understand the player perceives the versatility and value of the gamesworld through the embodied capabilities of the avatar in conjunction with situational contexts. Aspects of the environment are generally only interesting when they’re useful, but they’re only useful with respect to the capabilities of the avatar and the needs of the player.

Good luck with your project.