

The Manipulation of Reality and the Perceptual Quality of Virtual Environments

by Jean Perrin

PERCEPTION VERSUS THE REAL

It seems that people respond very well to concrete limits. Psychically, they help people to reduce tension and take a definite course of action in life. What is even more interesting is that these limits do not necessarily need to be based in reality. It is as simple as driving in a car, red light/green light—we stop and then we go. In the design world, what I have discovered is that virtual environments allow for individuals to debate and refine various perceptions about visual reality.

In a psychological frame of mind, our defenses (e.g. denial, boredom) allow us to smooth over perceptions of the world that are not congruent with the way we experience life. They allow us to create a story that fits with our perception of ourselves in our world. Individuals learn and sometimes need to create a reality that fits with their interpretative way of seeing the world. In terms of visual expectations in the virtual world, the manipulation of 3D environments can offer individuals an unconscious redirection of emotions, from one remembered space to another. Eisenman, an educator and architect who extended deconstructivist ideas into the architectural realm, argues that the “electronic paradigm” challenges architecture because it “*defines reality in terms of media and simulation, it values appearance over existence, what can be seen over what is.*” In essence, the virtual world starts to introduce the nuances between “*how and what we see.*” As an inhabitant of space, the primary goal for an individual is to find an identity within a space, to find a reality that confirms our way of seeing the world around us. What I have realized through psychoanalytic study is that what is real, is the perceptual quality of the way we register space, not the literal physicality of objects or elements in a space. Through the dimensionality of virtual environments, the individual is able to pull fragments from past emotionally cathected space and reassemble these memories into a familiar perception of space unlike physical modeling efforts. Environments become compilations of our past visual experiences. Kant even argued that the world is not as it is, but as we are and in this sense and



Figure 1: Design or deformity; purpose or coincident?

a space becomes flooded with unconscious that visually stored and reprocessed each time we enter a new space. Virtual tools can ultimately recreate a particular perception of an environment as “we are.” Virtual tools have the ability to create the all-encompassing mood of space, in addition to the textural and emotional quality of an environment. When a person first inhabits a space, they react to their perception of the space, not the space as it actually exists. Psychically, individuals can shift and adjust their perception of events as is necessary to create a story unique to their perception and necessary for the psychological continuity of their life story. In summary, virtual tools have the distinct ability to explore the visual quality of space. Space can be created, discussed and then refined, offering designers and users the ability to begin a dialogue about the user’s textural desires, needs and vision for a space.

DECONSTRUCTION AND THE NATURAL

Derrida, known as the founder of deconstruction, makes a similar point in a documentary made with and about him in 2002. When asked to discuss love, he poses the idea that love must be understood within a particular framework. It is the difference between “the who” and “the what” that defines a person’s understanding of love. Derrida questions whether we love someone in their singularity or if it is our perception of their qualities that we love, placed underneath the broad umbrella of the word

“love.” Derrida states, “does someone love someone, or does one love the qualities about someone?” Similarly in the virtual world, it seems to be less about capturing the oneness of space, and more about recreating a particular quality or qualities that narrates a particular perception or experience of space.

Another deconstructivist thought is not to naturalize what is not natural. In terms of traditional architectural representation, a language has been created among design professionals to represent space. To assume that architectural symbols, plans, elevations, a stylistic way of drafting and lettering are “natural,” might be considered false. People in the design community seem to have conventionalized a way of reading and experiencing space. In the 3D visualization realm, architectural representations not only have the ability to be universally understood, but can also capture life as they actually capture space compatible with visual intuition. Figure 2 demonstrates the highly reflective properties of a polished terrazzo floor. While its high degree of shine may seem unexpected, it feels correct. In other words, a person visually accepts this image in its entirety and would most likely not question its realness. Similarly, Figure 3 illustrates how the top of portion of a wall is visually darker than the bottom portion of the wall. Typically, we think of the bottom portion of an object as being not only physically, but also visually the heaviest. However, we visually accept this real representation and do not question this image as a whole. Interestingly in architectural drawing conventions, different line weights are used in an effort to create order and clarity in design representation. Typically in an elevation, the heaviest line is the ground plane where the bottom of a wall sits. In a sense, this reorders or teaches an individual to conform to a design standard, which is based upon a system of symbols, not the natural order of perception.

VIRTUAL ENVIRONMENTS AND DREAMS

With digital tools, designers can visually share their unique perception of space. In psychoanalytic room, the analysand’s flat retelling of a dream is not as valuable for



Figure 2: Reflectivity versus intuitive expectation.

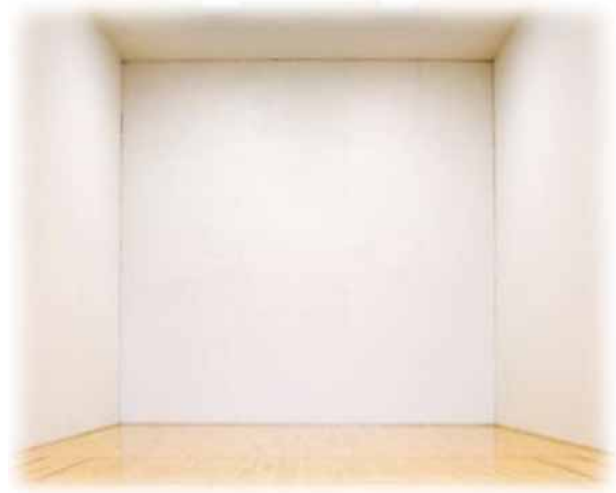


Figure 3: Reflectivity versus intuitive expectation.

the analyst, as the emotional, textural and visual quality of a dream. In this sense, the way a dream feels becomes more important than the flat retelling of a dream’s plot. Similarly, virtual environments can portray the textural quality of the way we experience and remember space. Virtual environments are also capable of arousing emotion and triggering memory so that dialogues about the experiential of space aspects can occur. Ultimately in the professional world, individuals can potentially decide upon experiential aspects of a space before a space is physical created, avoiding a potential element of surprise, typically occurring when individuals see a completed space for the first time (even though prior to seeing it, there was full awareness of building materials, sizes, lighting fixtures, etc.).

IN THE NEIGHBORHOOD

One important element in beginning a dialogue about the unconscious aspects of space, is understanding the narrative component of virtual animations. Similar to editing film, the narrator has the ability to control and manipulate the way in which a story is perceived. In virtual animations, the camera highlights and/or fragmentizes the way we experience space. Thoughtful narration can help the viewer to digest space according to the way it feels, rather than the way it physically exists. In the analytic session, Busch highlights the importance of being “within the patient’s neighborhood” in the analyst’s communications to the analysand. Busch writes that “the patient must be able to make some connection between what he is aware of thinking and saying, and the analyst’s intervention.” Busch continues to write that “no matter how brilliant the analyst’s reading of the unconscious, it is not useful data until it can be connected to something the patient can be consciously aware of.” Narration in virtual space is no different; the individual must be oriented to the space in a manner which is congruent with the way he or she first perceives space. In the analytic session, Busch seems to emphasize that the patient cannot fully



Figure 4: This image represents a particular visual moment—i.e. the dizzying feeling one has when looking up the side of a tall building. This image attempts to represent the texture of a specific reality.

register information foreign to either his/her intuition or experience; therefore the analyst must help the analysand by making his communications within the realm of the patient's current psychic locale. Similarly, no matter how thoughtfully a space is designed, if the narrative aspect of an animation is not within the viewer's visual realm of intuition or experience, the space might potentially hold less meaning for the viewer. The narrative component involved in virtual animations must help the viewer to understand the designer's pace and intent so that dialogues about virtual reality may occur. With strategic zooming and manipulation of the camera in space, comes a visual communication to the viewer that is hopefully within the neighborhood of how a viewer registers a particular space



Figure 5: The composition of this image demonstrates the experiential aspect of space.

for the first time. Furthermore, Gray emphasizes that there is a “developmental lag” between what we intellectually understand and what we can emotionally understand. In this regard, the way a person experiences space is no different. Comprehensively, a viewer might visually see all the components of a space, but cannot comprehend on an experiential or intuitive level how a space might be experienced without the designer directing the animation of the space.

DECIDING ON A REALITY

The need to decide upon a reality becomes an important urge necessary for psychological survival. As architectural designers, the stories created for survival become testing grounds for augmenting and denying visual realities.

Interestingly it seems that there are individuals that believe that the most believable capturing of a space is the one based on the consensual agreement of how a sample number of people visually see components of a space. Whether a virtual rendering of space confirms the agreed upon physicality of space is ultimately less important than the concreteness of a story or an illustration that confirms a unique perception, or even better the collective unconscious of people at large. Virtual tools have the ability to challenge the perceptual qualities of space, ultimately redefining our visual stories and expectations for the physical world. Environments can shift and change, as old visual understandings latch onto new ones, redefining ourselves in the environment we exist. As designers we can start designing less in accordance to the limitations of our current physical environment and more toward the experiential aspects of space as created and defined by virtual tools.

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Jean Perrin combines her diverse interests in Psychoanalysis, Human Factors and Interior Architecture to explore the limits of human perception. She believes that the fusion of intuitive thinking and visual judgment can lead to innovative formations. Digital technology is primarily defined by human factors, but in-turn has the ability to help us transcend our own limitations in the area of conceptual, visual and emotional thinking/existence. Digital technology has an ability to inform our own emotional existence, and vice versa, our emotional intuition can help us to navigate digital landscapes. Jean Perrin holds a B.S. in Design and Environmental Analysis from Cornell University and a M.A. in psychoanalysis and is currently pursuing her doctoral degree in psychoanalysis at Boston Graduate School of Psychoanalysis.