- **Interpersonal:** The process of learning from interactions with other people. This person might be a caring sort or a social butterfly.

- **Intrapersonal:** The process of learning from oneself. These are the quiet people who are always looking within themselves for answers.

- **Naturalistic:** The process of learning from relating to one's natural surroundings.

If designers keep each of these intelligences in mind when designing a game, they can open it to an infinite number of players. These intelligences have been used in games before. Eve Online and Dungeons and Dragons appeal to those with logical and mathematical minds with all of the stats that players have to keep up with. A Rubik's Cube and games like Lumines appeal to those people with a shine for spatial learning. Dungeons and Dragons and most text-based roleplaying games (RPGs) appeal to those who learn linguistically. Games like Red Light, Green Light and any of the new motion-controlled games excite those keen on kinesthetic learning. Musical Chairs and Legend of Zelda: Ocarina of Time utilize music to bring in those who learn this way. The advent of the Internet's online play and group play in Dungeons and Dragons appeals to those who learn interpersonally. Solitary games such as Solitaire and some RPGs help those who are self-reflective learn more about themselves intrapersonally. Scavenger hunts and hidden items games allow those who learn from their surroundings in a naturalistic way to excel.

Many games utilize two or three of these intelligences, but how many of them touch on a little bit of each?

Howard's Law of Occult Game Design

Howard's Law of Occult Game Design (or just The Law of Occult Game Design or Howard's Law) can be expressed as a formula: "Secret Significance ∝ Seeming Innocence × Completeness." Translated into everyday speech, this equation means that the power of secret significance is directly proportional to the apparent innocence and completeness of the surface game. In this case, *innocence* refers to a surface that appears simple, cheerful, even carefree. *Completeness* means that players can experience the game naively as a conventional platformer, shooter, or

other standard game genre without being aware of any thematic depth. Sudden knowledge of the game's depths transforms players' experiences. The Law of Occult Game Design is often connected to a sense of the esoteric, of occult significance in both the connotation of dark magic and the original definition of occult: hidden.

The Law of Occult Game Design is why many indie game designers with emotive and thematic design goals tend to work in retro genres with simple mechanics and art styles. Indeed, many successful independent games could be boiled down to "the game seems like a simple platformer (or shooter/adventure game/puzzle game) but then. . . ." Retro genres and styles bring with them nostalgic expectations of simplicity associated with the early history of games. A metaphysical meditation on unseen cosmic forces is more unexpected, and therefore more powerful, in a sidescrolling shooter with eight-bit graphics and a chiptune soundtrack.

Often, a particular mechanic has an unusual twist that operates in both the narrative and gameplay universes of the game, thereby exemplifying excellent narrative design. For example, Braid is a sidescrolling platformer in the style of Super Mario Bros., but Braid's time-reversal mechanic encodes a reflection on the nature of love and loss. Eversion appears to be a platformer into which Lovecraftian cosmic horror gradually intrudes, revealed partially through the player's ability to *evert* (shift between dimensions). Terry Cavanagh's Don't Look Back appears to be a simple platformer, but the player is not allowed to move backward as he emerges from the underworld in the second half of the game. This gameplay rule mirrors a narrative rule attached to the hero, Orpheus, when he tried to rescue his lover, Eurydice, from the underworld: He

could never look back, or her spirit would be pulled back into the land of the dead.

All of the games mentioned here create a similar transformative experience for the player, in which a seemingly ordinary game is revealed to have concealed thematic depth the entire time (see Theme), much like a Magic Eye picture from which a secret design suddenly emerges. Howard's Law suggests that the intensity of this transformation will be greater to the extent that the game initially seemed to function as a one-dimensional, self-contained experience.

Occult design is also connected to the idea of the *Easter egg* (a secret hidden within the game, such as a designer's initials), but the Easter egg as integrated with the enterprise of world-building. The first Easter egg appeared in the Atari 2600 game Adventure, in which players could access a secret room with the initials of the game's creator, Warren Robinett. Some Easter eggs promise a vast expansion of the original game, as if offering players the opportunity to peer beyond the veil into another world. For example, in the original Legend of Zelda for the Nintendo Entertainment System (NES), players who input the name "Link" after completing the game once revealed a second quest with altered dungeons.

Howard's Law has design consequences in space, time, mechanics, and cumulative experience. In level design, densely packed, interconnected labyrinths with many hidden passageways and alcoves are the most effective ways to hide secrets. Demon's Souls exemplifies this level design principle, which is writ large across the overworld in the game's spiritual

successor, Dark Souls. In terms of time, games that contain events that recur at regular, but unexpected, moments are especially powerful, as when black demonic dogs roam the streets after midnight in the cult horror game Deadly Premonition. Occult design can influence obscure mechanics, such as world tendency in Demon's Souls, in which an undisclosed global variable allows an aggregate of player actions on the server to unlock hidden events, areas, and characters. Such secrets function most effectively when they combine cumulatively to reveal larger truths about the world of the game, as when the demonic dogs of Deadly Premonition echo an overarching dog shape in the map layout, as well as the pet dog of the game's disguised cosmic antagonist.