

# The Evolution of Architectural Animations: Strategies, Techniques and Uses

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**Abstract-** Animation is the art of displaying a sequence of images (frames) at a rapid speed to create the illusion of movement. The practice of animation can be traced as early as the 1800's. It has been mostly associated with the entertainment industry, and its early forms include silhouette cut-out puppetry, stop-motion photography, and the most popular form of the 20th century, cel-animations. On the other hand, the use of animation in architectural practice is relatively new, having been introduced to the architectural practice with the advancement of 3D CAD animation software in the 1990s. Although computerized architectural animations are sometimes used to explain technical information, they are often used to depict the experience of space. Therefore, it will be useful to gain an understanding of its predecessors as a basis for understanding the current computerized architectural animations.

This paper traces the historic evolution of computer-based architectural animation from 1990 to the present. It uses Marshall McLuhan's *tetrad of media effects* as the structure for analysis. The tetrad states that the introduction of a new medium has various effects: it enhances, retrieves, pushes to the extreme and renders obsolete other mediums and social effects. This paper traces the influence of Architectural animation on the practice of architectural education and profession. When a medium enters the scene, it renders several others *obsolete*, for instance: traditional animation, technical pen-and-paper perspectives, sequential sketches, architectural scale models, architectural endoscopy, stop-motion animation, the humanized touch. It also *retrieves* old mediums like sculpting, carving. It retrieves the chalkboard, the theatrical stage: an imaginary narrative space. It *enhances* Thinking and design process, the variable form, communicating information and realism. If pushed to its limits, the medium will *reverse*: Resource overload: the controller becomes the controlled; it requires knowledge and training curve. It has Deceptive visuals and the suppression of the other senses, and interactivity. This paper will elaborate on these effects the introduction of an architectural animation can trigger.