

THE NEW TOOLS OF THE TRADE

VIRTUAL REALITY IS NO LONGER SCI-FI

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VIRTUAL REALITY (VR) AND AUGMENTED REALITY (AR) HAVE BECOME A COMMON AND INTEGRAL PART OF OUR DESIGN PROCESS AT GENSLER. VR AND AR ALLOW SOMEONE TO ESSENTIALLY “EXPERIENCE” AND, IN SOME CASES, INTERACT WITH A THREE-DIMENSIONAL SPACE BEFORE IT IS BUILT. THIS HAS OBVIOUS BENEFITS WHEN IT COMES TO COMMUNICATING PROPOSED DESIGN SOLUTIONS TO CLIENTS.

Even the best photorealistic renderings when printed or viewed on a screen leave something to the imagination that VR and AR, even if less than photorealistic, can make up for. They make it easier than ever before for clients to get a truer sense of the scale of a space, the relationship between different spaces, and the natural and artificial light quality, and they enable more rapid exploration of options for construction materials, environmental graphics, and furniture and finishes.

Virtual reality as part of the design process has both time- and cost-saving benefits, as it allows design decisions to progress faster and more confidently, with clients being able to provide approvals based on a more literal representation of a potential outcome and provide feedback to the design team that might otherwise be lost in the process.



IT'S ABOUT MAKING THE CREATIVE PROCESS MORE IMMERSIVE, AND IT'S FUNDAMENTALLY CHANGING THE WAY WE EXPERIENCE DESIGN, FROM IDEATION TO DELIVERY.

Likewise, an early adopter of BIM (Building Information Modelling) software, Gensler has also been

using Autodesk Revit for several years as our core design and documentation platform across all offices.

Revit is not only a powerful 3D visual modelling tool, it is also a collaboration tool that allows multiple internal design team members and external consultants to better coordinate the entire design and delivery process, and it can even be used by clients later in their ongoing building management programs. Revit also allows for more accurate estimating of quantities and costs, and it is extremely helpful in understanding the performance data of a building or space from an energy-use and sustainability perspective.

But let's back up a bit. No two clients and no two projects are ever the same, and the communication tools that we use in the design process largely depend on the specific needs of the client and the project at hand. So how do we know when and how to use the right tools for the job?



DESIGN IS A CONVERSATION ...

We have a saying in our studio in Sydney: "Design is a conversation." It's a reference to the way we've designed our own space, but also to the way we view the design process.

VR ENGAGES CLIENTS AND END USERS AS MORE ACTIVE PARTICIPANTS IN THE DESIGN PROCESS.

But even though VR (or a photorealistic rendering or physical 3D-printed model) can sometimes "speak for itself," it's still important for a designer to be able to not only explain a design verbally, but articulate a solid reason for design decisions that reflects an understanding of the client's needs. Designers need to be able to communicate their unique point of view and their rationale for a particular design concept and do so honestly, passionately, succinctly and convincingly. As stated, an immersive VR experience takes things a step further than a rendering, but even VR can leave design intent open to interpretation. The design process, whatever communication tools are used, is still about listening and learning, suggesting and responding, testing and refining. The tools and technologies and mixed media we use in the design process, no matter how advanced, are still just one part of a continual conversation with the client.

And it's also important for clients to know that a photorealistic rendering or immersive VR experience doesn't

necessarily translate to a design being "complete." There are always inevitable changes as the design is further developed, documented and constructed. The benefit of tools like Revit and VR, however, is that those changes can be greatly minimised.

REGARDLESS OF THE MEDIUM

With all the technological advances we've seen, what about two-dimensional drawings and drawing by hand? While it's an often-debated topic in the design world, it would seem incredibly unlikely that hand-sketching will disappear anytime soon as an essential part of the design process. Once we have a brief from the client and a good understanding of their functional and programmatic needs, all projects still commence with hand-sketching to some extent, whether it's two-dimensional zoning diagrams to begin thinking through space allocations, adjacencies and circulation or to begin exploring three-dimensional concepts for key areas.



The proliferation of digital design tools does not negate the fact that designers still have to know the basics. Hand sketching is an incredibly valuable skill for a designer, and not only as a space planning or ideation tool used by the design team internally, but also as a very effective means of exploring ideas in the moment with clients, consultants or contractors. A good hand sketch, even the most basic, can communicate an

idea remarkably quickly, whether it's a large volume of space, a piece of joinery or an intricate detail. Whether hand-sketching or using software, designers are still thinking three-dimensionally, and whether it's sorting out the big ideas or the most complicated details, it's about knowing your audience and utilising the best means possible to communicate the idea to the client. Again, design, in whatever medium, is a conversation.

WHAT'S NEXT?

As a firm, we are committed to leveraging the latest technology to engage our clients in a design process that leads to meaningful results for their organisations. 3D design software and hardware tools have already radically changed the architecture and design industry, and new technologies continue to emerge that will lead to even more profound changes, allowing more realistic virtual realisation of ideas prior to their physical realisation. What excites us is just how quickly these digital visualisation and collaboration tools are evolving and the possibilities that lie ahead, not just for the design industry, but across all industries. VR and AR are only the beginning. The promise of computational design and the ability to harness new innovations in computing power, digital fabrication and prefabrication have us looking ahead toward an exciting future in the design and construction of our built environment. We're going from science fiction to real-world, mainstream technologies at an incredible pace, with the only limitation being our imaginations.