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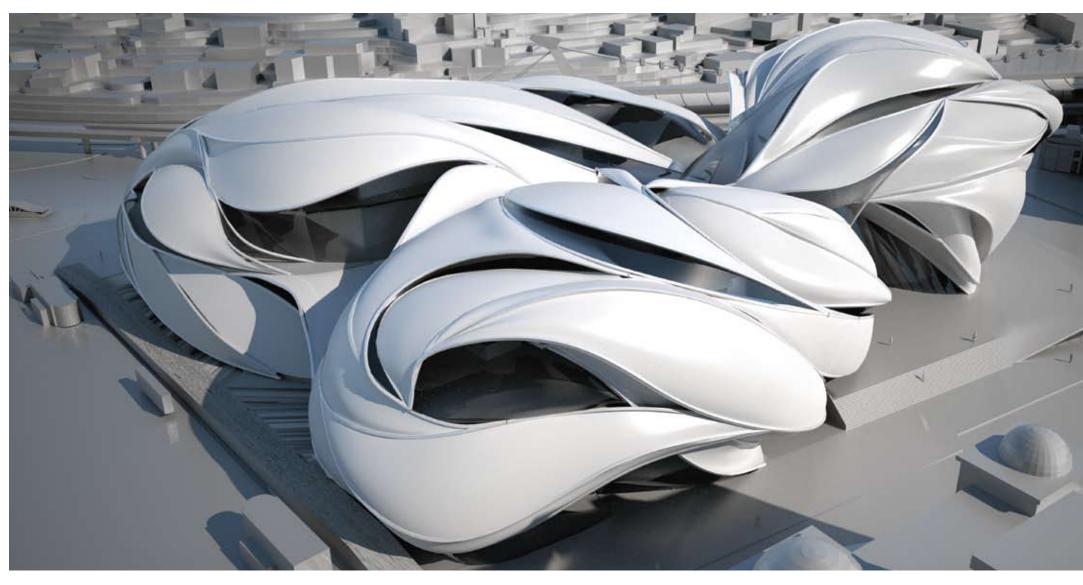
elementemag.com .59 "Their projects motivate viewer interaction through a landlaizing array of optic and haptic spatial techniques that encourage spectators to move about in endless musical rhythm."



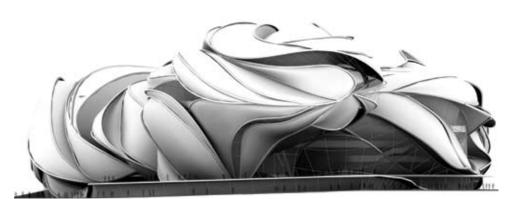
"THE PURELY DIGITAL OFFICE IS OVER" declares Herwig Baumgartner and Scott Uriu of B+U in my recent interview conducted at their Los Angeles architecture office.

Baumgartner and Uriu began working together nine years ago in an effort to launch what is now proving a new trajectory for the post-digital design era.

Computer animation technology had an enormous impact on architecture and the design profession since the late 1980s, but as Baumgartner and Uriu see it, "this purely digital romance" has faded. "The purely digital office reminds us of the purely digital studio in music which was huge in the 1970s; everyone threw-out their analog equipment and then sure enough ten years later all that stuff came back in," Baumgartner recalls. "The all digital sound was too dry, and then they tried to create effect machines to make it sound warmer; in the end people began just to use the analog and digital in combination with each other," he concludes. Baumgartner and Uriu are among many young architecture firms that are working towards a new trend in contemporary design—to combine a wide variety of analog and digital media together in their practice.



Baumgartner and Uriu began their partnership with mutual fascination for electronic music. Their original research for "Sound City"--an urban development project for Broadway Boulevard in downtown Los Angeles, explored the use of sound as an urban and architectural design tool. Their concept for the 12 city block redevelopment study took shape in response to their investigation of urban sound wave patterns. Working alongside MIT engineer Steven Klein, Baumgartner and Uriu created



Above :: Urban Concept

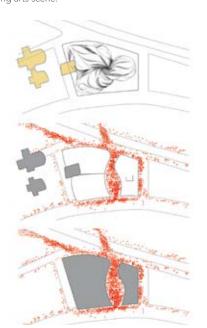
Proposal for the Taipei Performing Arts Center intended to become an important landmark building in the region expressing the richness and diversity of performing arts and creating a destination point for the area. The morphology and shape of the building was designed using sound-waves that were analyzed and transformed into three dimensional vectors. The building materializes with a metal and glass enclosure that reveals its activities in a variety of scales and angles to the city.

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"Soundplot" software that diagramed ambient sound throughout the given environment. The software translated that sound into an array of continuous wave patterned surfaces that Baumgartner and Uriu used to generate form. Instead of just simply deploying the resultant surfaces to generate idealized "sound forms" however, they eventually began to examine the resultant vector wave patterns in order to generate unique building structures. In their canopy design for an urban lounge and café on Mateo Street in the artist district of downtown Los Angeles for example, they created a structure designed in response to local sound conditions. The shape of the canopy created a comparatively unique pattern associated with the sound generated at this particular site. Clad with video projection screen surfaces amidst an array of mini-speakers—this unique event structure could be used to set varied moods and lively ephemeral conditions.

Very familiar designing cultural venues at both small and large scale, Baumgartner and Uriu have extrapolated their sound wave studies to much larger venues. Baumgartner formerly a senior associate and project architect at Gehry Partners has over 10 years experience working on complex performance centers such as the Experience Music Project in Seattle, the Walt Disney Concert Hall, in Los Angeles, and the CalArts Theater in Los Angeles. Uriu also formerly of the Gehry

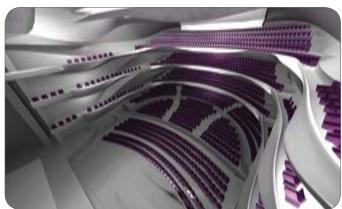
Right:: Taipei Theater Concept The concept for the theaters was to design a flexible world class performance space that allows for a variety of different performance genres and is especially tailored to the needs of the Taiwanese interdisciplinary performing arts scene.



office, worked on the Experience Music Project in Seattle, in addition to the Jay Pritzker Pavilion in the Millennium Park, Chicago. Their work together at B+U now combines their mutual talents and experience which can be seen in a progression of projects from "Soundcloud"--the urban lounge and café on Mateo Street, to their most recent competition entry for a Performing Arts Center in Taipei. Baumgartner and Uriu's sinuous synaesthetic designs build upon a clear strategy to enliven urban social conditions through a series of complex and continuous curvilinear surfaces that engage the movements of varying crowds if not swarms of people. Their projects motivate viewer interaction through a tantalizing array of optic and haptic spatial techniques that encourage spectators to move about in endless musical rhythm.

Without hesitation, Baumgartner and Uriu will admit that their work is clearly inspired and informed by digital media. But at no time did Baumgartner and Uriu believe that they could just set-up their own shop without significant hands-on experience in architecture practice. If for a moment in recent history, young digital designers with little or no practical experience could elaborate stunning stylized images and forms that pushed the boundaries of the design profession—that time has clearly waned. Baumgartner and Uriu admit that they used to predominately investigate their





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ideas through purely digital media, and certainly during the 1990s at schools like Columbia University, this was all-the-rage. But as approaches to digital media have since matured—they have recognized design ultimately is related to material construction. This is why it is so important to build models during the design process they explain, in addition to developing mock-ups in the field to test new techniques in construction. "The digital model is in itself not the answer to everything," Baumgartner remarks, "we use [analog] models to check ourselves" as "renderings can lie."

Materials ultimately resist form and challenge design conceptions, and at B+U their search to design complex structures is informed by advanced analog modeling techniques that test the funicular nature of wood and metal materials. In their spectacular design for an art studio and wine cellar for Kevin and Claire Cohen, Baumgartner and Uriu have created a voluptuous curvilinear structure using both digital and analog modeling techniques. In fact, their analog models have proven far more productive to their process than any digital 3D printer could ever offer. To feel the space and forces moving through the design "we need to get our hands on it," Baumgartner explains, as he qualifies the affect and feeling of the design process itself. "Just to print models is passé," he purports. At B+U they build tangible wood, metal, and polycarbonate models to get intouch with the shape of their designs. "We work guite a bit in models," Baumgartner explains, and "we build a lot of mock-ups." For the Cohen residence, they built a section of what they describe as a "band wood structure," that is "basically a structural piece of wood that gets steamed and crushed



and then bent, and then it stays in shape when it dries out," Baumgartner details. These band wood structures are constructed they argue, through an "affordable process" that can realize very impressive curvilinear forms.

For B+U, design is not merely a formal pursuit of pure imagination or simply the representation of an idea that can be materialized at the push of a button. They develop their designs that are not for competitions directly with their clients, engineers, and contractors. For private clients John Frank and Diann Kim in Pasadena for example, "we started out with a small addition, and the clients have been pushing us in developing the design," explains Baumgartner. To meet the client's needs, B+U eventually conceived an ethereal steel entry canopy that expanded across the entire building lot between the house and the street. In developing the design, they consulted with Dr. Anders Carlson of GMS Engineering to study the potential characteristics and limitations of select materials for the project. With Carlson's assistance they created a dynamic

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Above :: Soundcloud, Los Angeles A sculptural installation and functional canopy that attempts to reclaim and re-imagine public space in the context of a highly urbanized and industrialized neighborhood.

60 feet long cantilevering steel structure that could be clad with white translucent fabric and lit from the inside. Confronting the pragmatics of construction, they then built a mock-up in their office. "When we initially sent the job out to bid" Uriu explains the contractors "came back with just enormous initial bids—way over budget." But after B+U put together their full-scale mock-up, the price dropped 50%. "People get used to building a certain way," Uriu observes. "It's the scare factor," interjects Baumgartner. "If they look at something they don't understand—it is automatically double. If you show them something like this [a mock-up] that they can wrap their head around—oh this is how I can build it—these are the parts, it becomes more tangible and prices come down. This is what we definitely learned at the Gehry office," Baumgartner recalls, "to break down the project from a visually complex thing into its component parts." Through this process, the contractor can get involved in the design and help make concrete recommendations.



Above :: Herwig Baumgartner, of B + U Architects

For B+U, architecture is a tactile form of expression that pushes on the habits of material and building culture. Their evolving fascination with materiality however does not mean that their interest in digital technology is dead per se, but that the glamour and allure of the purely digital savant is clearly no longer of interest to them. Design is not about "shooting over an electronic 3D model" to the contractor despite how well detailed the drawing file, and then simply expecting them to build it Uriu surmises. To ensure the integrity of design innovation, B +u have learned to realize that they need to search for an integrated approach to architecture, where designer, engineer, and builder can work together with the client throughout the process. For B+U, design is not about having a pure concept digitally drawn-up ahead of time and then built to match in the field. It is instead an evolving process elaborated through a performative art of making.

Stephen Phillips, AIA, Ph.D. is an award winning designer and practicing California architect, theorist, and scholar.



Above :: Scott Uriu , of B + U Architects



