

Reflections from a Concert Hall Design Practitioner

Alban Bassuet

Why do we go to classical music concerts? Or, more specifically, why do we *still* go? Performances nowadays are often live-streamed, the digital concert hall competing with the original analogue space. Microphones, 3D sound and video-immersive technologies can provide a more intense and participatory experience than the traditional concert hall, allowing the spectator to be seated within the orchestra, or even to switch seats during a performance. The Van Cliburn piano competition experienced something of a renaissance when participants' performances started to be streamed online, with cameras at both ends of the keyboard. Watching the performances was significantly more engaging for observers than sitting in the empty hall for the 6-week duration of the competition. In fact, the digital experience was enhanced by the viewer's ability to read the thoughts of other listeners, their online chat running alongside the video stream.

Not only current performances can be streamed; entire archives of concerts and festivals are becoming accessible as well. The Montreux Jazz Café at the EPFL (L'École Polytechnique Fédérale de Lausanne) offers its customers access to performances from any artists who performed at the Montreux Jazz Festival from 1967 to the present day; the cafe provides a special playback room equipped with 3D immersive sound, video and fun LED-encrusted infinity mirrors. More concert venues are to come, and sooner or later every performance that took place over the last 100 years will be available online.

In today's world, an era of instant access, increasing isolation, fracturing societies, and parallel digital reality, the competition to the live concert experience is fierce. For some, going to a concert can feel like some kind of amputation for not being able to use a cell phone during a concert and engage the 'digital self' into a performance. In the Americas, the 2008 financial crisis has driven many orchestras to bankruptcy. Newer facilities in Europe, traditionally financed by governments, are now requiring private funds. Incidentally, further east the enrichment of the middle class in China has created a significant boom in the classical music industry, and the Middle East is embracing Western classical repertoire as part of utopian cities built on sand.

But if we take societies where the Western classical music tradition has flourished for several hundred years, both the attendance and the diversity of audiences going to concerts are declining; large portions of the population are not finding enough interest in the conventional concert hall experience.

For designers of music spaces such as myself, this situation poses a unique challenge: we need to adjust or shift our design philosophies to respond to the modern-day context and guide the way towards the possibility of some sort of audience emancipation.

Many possible solutions are in fact embedded within our current modes of consumption: that of the arts, entertainment and media more generally. In the same way that monophonic radio monophonic sound influenced the first large concert hall of the twentieth century, television and analogue sound influenced 1980s high-fidelity concert halls, and CD sound led to the analytical surround concert hall, today's medias are rightfully driving audiences to ask for much, much more. With on-demand access to quality online content, concert-goers want more emotional power, closer contact with performers, more immersive sound and space, informal and flexible environments, diversity of choice, freedom of movement before, during and after events, digital connectivity, and other forms of interactivity or participation. If the value of a performance is not

foreseen as unique and transformative, audiences will typically stay home. This leads to the central point of my argument: ***The desire for a transcendental experience is as old as the human race itself and a reflection of our irreducible spirituality. The rethinking of our means of presentation of the arts and culture in general is therefore an exceptional occasion to redefine rituals of music that engage with our metaphysical nature and erase boundaries between individuals. With the decline of religion, performance spaces (as well as museums) are becoming our societies' modern-day temples.***

This is not a new idea: spaces used for social congregation have long aimed to engage with our multisensorial and spiritual nature, often to mesmerize and transcend the human condition. For centuries, music and architecture, as well as their attendant social practices, have developed symbiotically: choral music composed by Palestrina and Victoria has resonated within the Sistine Chapel, surrounded by the mesmerizing paintings of Michelangelo and Botticelli; Joseph Haydn composed the majority of his symphonies and chamber music for the baroque music spaces of the Esterhazy Palaces; early operas were staged in ornate theaters such as those designed by the Bibienna family (scenographers and architects) as immersive spectacles of visual illusion; organs in Northern European churches were located just underneath a typically curved ceiling in order to distribute clear and intimate sound to aide parishioners' perception of layered contrapuntal textures (the instrument functioning as a vehicle for the voice of god); the music of Johannes Brahms and Anton Bruckner reverberated for the first time in the golden Musikvereinssaal in Vienna, 'an artwork in itself' of classical ambiance and design; similarly, music by Pierre Boulez, Luciano Berio, Kaija Saariaho, Jonathan Harvey and Philippe Manoury resonated within the acoustically reconfigurable Espace de projection at IRCAM, Paris, connecting digital composition and processing, electroacoustics and architecturally-designed space with both new and traditional musical

instruments. ***All these rooms, still in use today, remind us of the essential attributes that together create a transformative musical experience: the multi-sensory, multi-directional and symbiotic relationships between sound, space, people and instruments.***

In contrast, twentieth-century musical rituals have led to the design and construction of the typical 2,000-seat symphonic hall, its two-seconds' of reverberation serving the entirety of the classical canon. An archetype that some perceive as equivalent to a musical museum, the symphonic hall, when well designed, can more than adequately serve the so-called post-Romantic repertoire: that is, a narrow window of 50 years of music, stretching across the mid- to late-nineteenth century. The design, however, doesn't facilitate the clarity of sound and intimacy of expression required for chamber music, solo recitals, certain concertos, seventeenth- and eighteenth-century music; and greater flexibility is needed for 'modern' and contemporary repertoire.

In response to these perceived shortcomings, new spatial and scenic initiatives have been attempted. For example, when the New York Philharmonic programed the NYPhil360 event in 2013 with *Carré* (Stockhausen), *Répons* (Boulez) and *The Un-Answered Question* (Ives), the orchestra performed at the Park Avenue Armory instead of the Avery Fisher Hall: there the orchestra could be divided spatially and arranged around the audience, as envisioned by the composers. While these works were composed some fifty to a hundred years ago, today's composers are experimenting further: the majority of new works are designed specifically for screen media, experimental venues, multimedia installations or mixed-reality experiences, and audiences tend to gravitate towards different experiential environments: smaller venues for a more intimate and concentrated experience; reconverted found spaces for informality and suggestive historical context; experimental black-box theaters for architectural flexibility; and destination venues in urban or rural environments. The desire to fill the gap separating performers and audience is even more apparent in giant rock and pop venues. Poet,

singer and songwriter Jim Morrison (The Doors) had already foreseen the rock concert as a sort of communal religious experience. Nowadays large-scale venues regularly use 3D audio systems to create immersive sound, as well as xR augmented/virtual reality in order to bring performers closer to their audience, and connect with our 'digital self'.

It was in the early noughties that I personally started to notice this shift, while working at the multi-disciplinary design and engineering firm Arup: here we received an increasing number of requests from artists and composers for installation projects outside of the standard concert hall or museum. With the American artist James Turrell, we worked towards the construction of an outdoor pavilion with views onto the Houston skyline, playing with the ethereality and transience of both light and sound. The installation, called *Twilight Epiphany*, was somewhat ironically located outside the multi-venue music conservatory at Rice University. Calling for a meditative, multi-sensory experience, composers use a 3D sound system embedded in the solid concrete walls of the viewing area to compose music tailored to the space and synchronized to the light show scheduled every day at dusk and dawn.

Our collaboration with sound and visual artist Marina Rosenfeld for the 2008 Whitney Biennial at the Park Avenue Armory was a moment of revelation, and one of the events that launched the Armory into the twenty-first-century art scene. Rosenfeld arranged a choral version of the orchestral piece by György Ligeti with 34 teenagers standing in the center of the immense Armory floor, and composed electronic music overlays reproduced in the space via an immersive sound system (using a spinning horn loudspeaker). The audience was free to move around: for the duration of the performance, some would lie down on the floor, find isolation in dark corners, draw near to the singers, or sit and rest. The production offered a concrete manifestation of humans enthusiastically seeking a spiritual connection and enjoying the freedom to move through a sound field (rarely experienced in traditional concert spaces), just like a religious ambulatory ritual.

One of the most representative projects of the departure of the arts and culture from our traditional platforms of presentation is the Tippet Rise Art Center, opened in Montana in 2016, for which I led the design and worked as the art center director. Located north of Yellowstone National Park, the 4,900-hectare art center exhibits large-scale sculptures and features musical performances in indoor and outdoor settings, including the sculpture sites. Intimate performances are set in the acoustically optimized *Olivier Music Barn* and at *Tiara* outdoor acoustical shell. Both sculptures and performances are curated to create spaces for meditation and reflection, taking spectators away from the fast-paced urban life. For example, the sculptures of *Structures of Landscape*, by Ensamble Studio, were conceived as concrete monoliths, designed to emulate our ancient past and resonate with a sound within us, maybe forgotten, to remind us who we are as human beings. The center aims to create dialogue between art, music and the imagery of the vast natural landscape of the American West. It has captured the imagination of people who might not have gone to a concert in their own city, but would travel hundreds of miles, almost like a pilgrimage, to the unique mountainous site.

Alternatively, destination venues or found spaces are significantly less expensive to build and more sustainable than traditional 2,000-seat symphony hall facilities. The common desire for a more liberated and intimate contact with the arts opens the way for more ephemeral interventions in rural or urban contexts, giving new life to existing spaces or reconnecting with the natural environment. Old warehouses, train stations, factories and foundries can be renovated and turned into extraordinary concert spaces. Theaters can be built on barges to address sea-level rise, and ephemeral performance structures can be built in natural landscapes.

None of these situations is mutually exclusive. Cities will continue to build multi-million-dollar concert and museum facilities, more experimental venues will also be constructed, and music and art will

continue to develop as communities take advantage of interesting indoor and outdoor environments.

Competing with a growing entertainment market, the classical music concert remains sacred, a means to be transported into an imaginary world, to experience complex emotions, to share in the god-like presence of talented and virtuosic performers or to undertake a pilgrimage of some kind. Music had always been a multisensory and multidirectional experience. It is only recently (over the last 100 years) that it became more rigid, distant and codified. It is important to recognize the essence of the human condition, as well as these different functions, in the definition of new creative spaces for art and music, and to aim for a transformative experience. New informal venues appear to emulate universal human congregational principles, fostering diversity within audiences and rewelding the social contract, while providing closer connections between audiences and performers. The digital infrastructure allows spontaneous interactivity, giving spectators opportunity to participate in live performances, opening new ways for artist and audience interactions. A bright future surely lies ahead of us: that is, until we fully transition into the digital world.

Biography

Alban Bassuet is a venue and installation designer, planner and acoustician since 1998. Working with architects, he has designed world-class performance spaces such as the new Greek National Opera House, Le Rosey Concert Hall in Switzerland or the Taipei Asian Pop Music Center. He also collaborated with artists such as James Turrell, Ai Wei Wei, Philip Glass, Mark di Suvero, Patrick Dougherty and Stephen Vitiello for mixed-media art installations. More recently, Alban was the director of the Tippet Rise Art Center in Montana, recognized by time Magazine as 'One of the 100th World Greatest Places to Visit'. Addressing the needs for new and affordable venues, he also commercializes demountable venue

structures for mid-size communities for immersion in natural settings or found spaces.



Figure 1: Sistine Chapel Rome; courtesy of Musei Vaticani

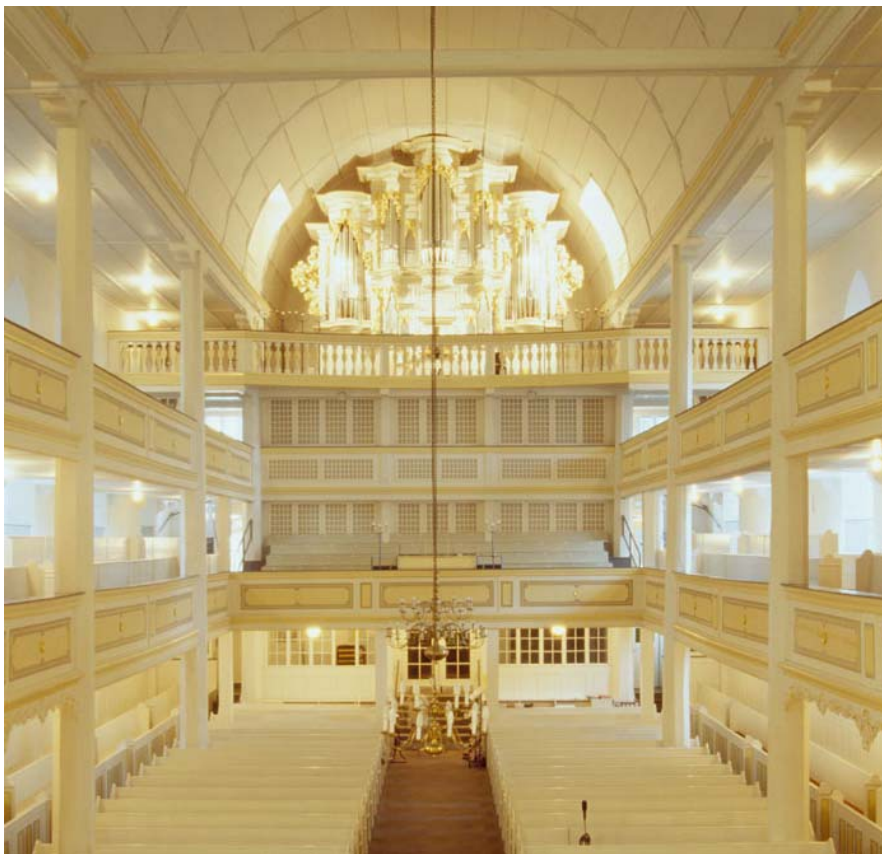


Figure 2: Bach Church, Arnstadt; © Andre Costantini

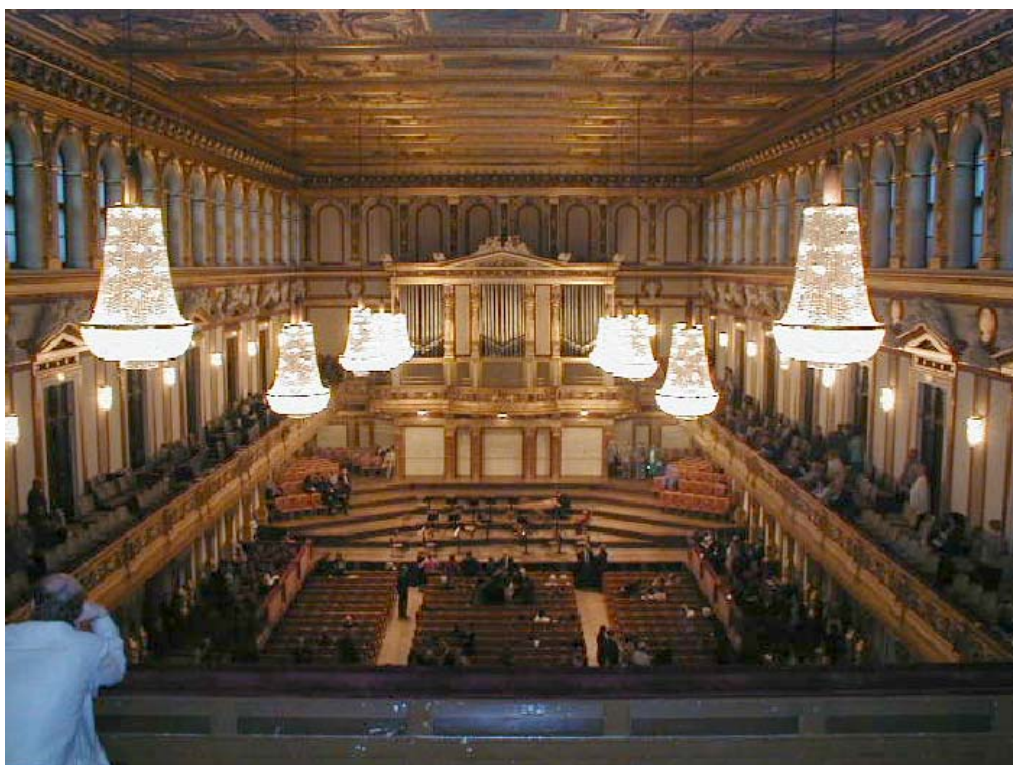


Figure 3: Musikvereinssaal, Vienna; © Alban Bassuet



Figure 4: Espace de projection, IRCAM; © Olivier Panier Des Touches



Figure 5: NYPhil360, Park Avenue Armory; © Chris Lee



Figure 6: *Twilight Epiphany*, James Turrell; © Alban Bassuet

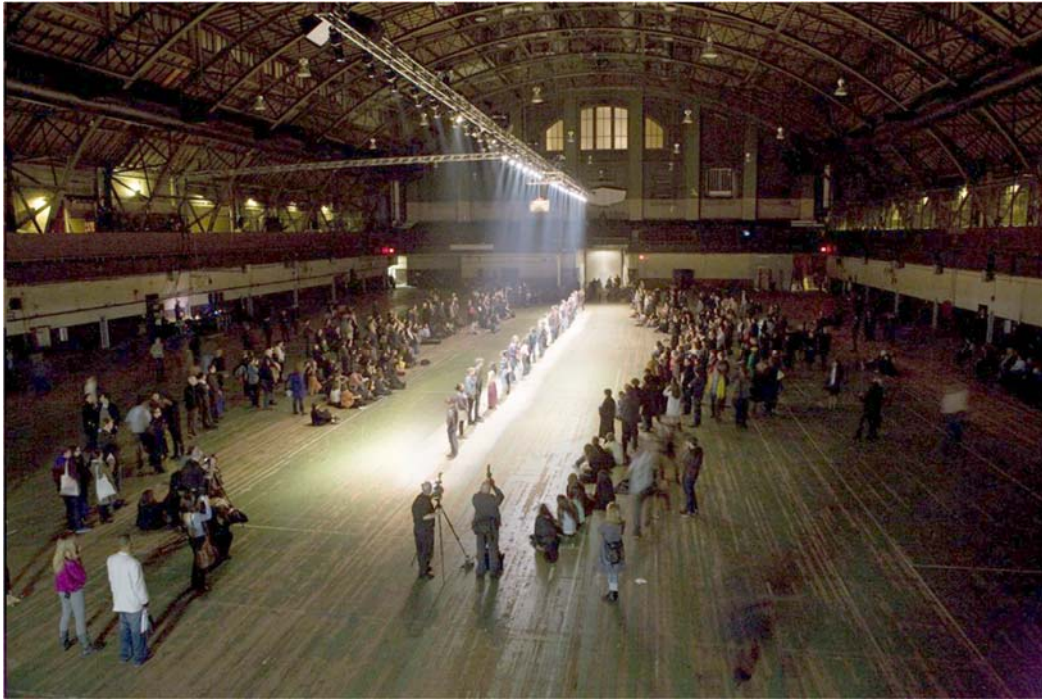


Figure 8: *Teenage Lontano*, Marina Rosenfeld; © James Ewing



Figure 9: Olivier Music Barn, courtesy of the Tippet Rise Art Center, © Erik Petersen



Figure 10: Tiara Acoustic Shell, courtesy of the Tippet Rise Art Center, © Erik Petersen



Figure 11: *Domo, Structures of Landscape*, Ensamble Studio, courtesy of the Tippet Rise Art Center, © Erik Petersen



Figure 12: *Beartooth Portal*, *Structures of Landscape*, Ensemble Studio, with musicians Yevgeny Sudbin, Vadim Gluzman, Johannes Moser; courtesy of Tippet Rise Art Center, © Emily Rund



Figure 13: *Music Barge*, floating theater concept, PresenceLab



Figure 14: *Aperture* TM , courtesy of the Tippet Rise Art Center, PresenceLab

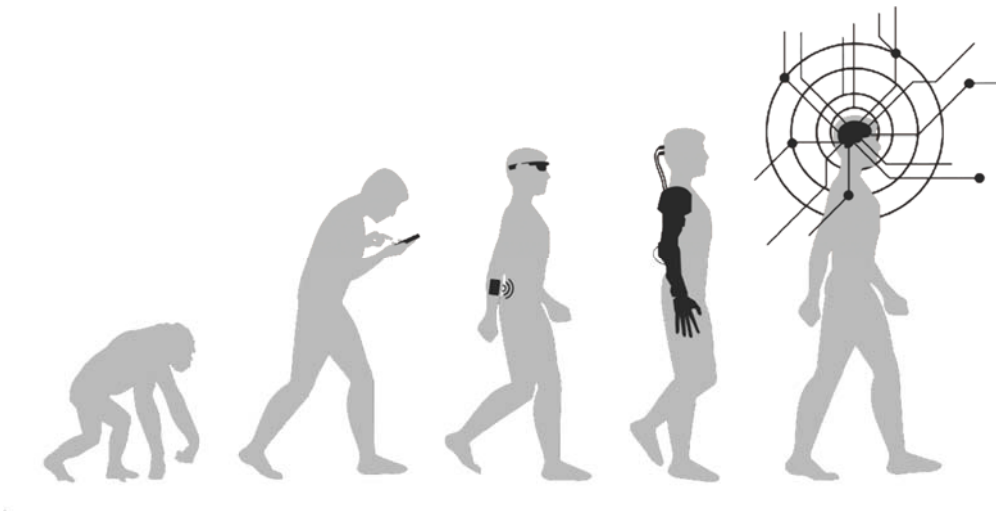


Figure 15: Human and technology evolutions

