

Revised Selected Papers

Accademia Musicale Studio Musica  
Michele Della Ventura, *editor*

2024

# Proceedings of the International Conference on New Music Concepts

Vol. 11



# **Accademia Musicale Studio Musica**

## **International Conference on New Music Concepts**

Proceedings Book  
Vol. 11

Accademia Musicale Studio Musica  
Michele Della Ventura  
Editor

Published in Italy  
First edition: April 2024

©2024 Accademia Musicale Studio Musica  
[www.studiomusicatreviso.it](http://www.studiomusicatreviso.it)  
Accademia Musicale Studio Musica – Treviso (Italy)  
ISBN: 978-88-944350-5-4

# Sphere of Influence: Art, Music, or Science?

David Allan

Marketing  
dallan@sju.edu

**Abstract.** For once, what happened in Vegas did not stay in Vegas. It exploded on the Sin City strip like an asteroid. It's called the Sphere and by most accounts it's a spectacle to be both seen and experienced. It is the latest attempt to align the planets of art, music and science. The following is a perspective piece to provide academic inspiration to add to the popular press. Some considerations include art v. commerce, atmospherics, performance, plus spectacle and intimacy. Let this article begin the show.

**Keywords.** Art, Las Vegas, Music, Science, Sphere

## 1 Introduction

It opened on September 29, 2023 at the Venetian Resort in Las Vegas. It is 366 feet high and 516 feet wide. It is the largest spherical building in the world at 875,000 square feet. It seats over 18,000 people and all seats have high speed internet access. It was built by Madison Square Garden Entertainment over five years at a cost of \$2.3 billion. It was the Sphere, “a hyperstimulating new performance venue in which the whole exterior is a screen, and the whole interior as well” [1]. U2 was the first performer in a residency titled U2: UV Achtung Baby Live at Sphere (Figure 1).



**Fig. 1.** The Sphere.

The city unofficially known as “Sin City” where “What happens in Vegas, stays in Vegas” was founded in 1905. Las Vegas (“the meadows” in Spanish) is city of 2,899,000 people. “Las Vegas’ transformation from local watering hole to world renowned fame can be attributed to a series of turning points in its history, with influences ranging from geology, government, organized crime, entertainers, the economy, business visionaries and large corporations” [2]. Las Vegas is home to 175 casinos, 100 sports betting parlours, 95 casino hotels, 349 venues and 664 restaurants not to theme and amusement parks. It has been called a city where “the simulacrum of glamour available to everyone ensures that no one gets the real thing [3].

Formed in 1976, U2<sup>1</sup> are an Irish rock band from Dublin, Ireland consisting of Bono (lead vocals and rhythm guitar), the Edge (lead guitar, keyboards, and backing vocals), Adam Clayton (bass guitar), and Larry Mullen Jr. (drums and percussion). They have recorded 15 studio albums, one live album, three compilation albums, 84 singles, and nine extended plays (EPs). They have won more Grammys for a rock band than any other band (22). They have currently have performed live 2132 times including the most recent performance in Las Vegas, Nevada. The New York Times review of their performance on opening night at the Sphere said: “a band unafraid of pomp and spectacle was sometimes out-pomped and out-spectacled” [4].

## 2 Themes for consideration

The goal of this section is to stimulate some theoretical thought about the Sphere by suggesting literature that has historically been applied to music including art vs. commerce, atmospherics, performance, spectacle, and intimacy each with my own contributions for future consideration.

### 2.1 Art v. Commerce

It has been and will continue be the first consideration whenever art and commerce (and in this case “science & art”) collide. The Sphere not only does not deny it, it gives it a spotlight.<sup>2</sup> It is a bit curious that “Science” (Table 1) is much larger than “Art-ists” (Table 2) on its website. Of course, the “artists” part is music. Music is after all, a social and political indicator that mirrors and influences the society we live in [5]. Whenever music and commerce are mentioned together there will popular culture implications. To its proponents, it is a cultural product that entertains and inspires large segments of society by providing meaningful and chronological reference points. To its opponents, it is part of a vast economic system that hypnotizes and massifies segments of

---

<sup>1</sup> U2.com

<sup>2</sup> <https://www.thespherevegas.com/>

consumers through manipulation and commodification. It is, after all, popular music [6]. But, in this instance, is the science the show and not the music? It seems like U2 may think so, as U2's creative director Willie Williams said "if the audience gets bored they can always look at the band" [7]. Future Research:

- 1) Art, Music, Science positive vs. negative considerations.
- 2) Is Science v. Commerce better or worse than Art v. Commerce?

### TABLE 1: SCIENCE<sup>3</sup>

Area of Sphere  
Volume of Sphere  
Finite Element Method  
Geodesic Math  
Laws of Sines  
Pi  
Stereographic Projection  
Visual Acuity  
Snell's Law  
Lens Projection Formulas  
Fanger's Equation  
Linear Stress Constitutive Equation  
Venturi Effect  
Navier-Stokes Equations  
Shannon-Hartley Theorem  
Huygens-Fresnel Principle  
Helmholtz Equation  
Kirchhoff-Helmholtz Integral  
Kirchhoff Integral Theorem  
Wave Equation  
Hartley's Law  
Laplacian  
Cauchy Momentum Equation  
Sellmeier Equation

---

<sup>3</sup> <https://www.thespherevegas.com/science>

**TABLE 2: ART: ARTISTS<sup>4</sup>**

Refik Anadol

Darren Aronofsky

U2

## 2.2 Atmospherics

What if music in this case is just an atmospheric and not the main attraction? Is that a bad thing? Certainly, popular culturalists would think so since it would suggest that music is again a tool of commerce. Kotler [8] introduced the concept of *atmospherics* (including sound) as a controlled marketing tool in relation to indoor space. Bitner [9] developed this theme further with the *servicescape* concept, highlighting music as one of many physical environment dimensions (including temperature, air quality, scent, etc.) that impact upon cognitive, affective, and behavioural responses of consumers and employees within service environments. Music does play an important role. Kozinets [10] suggested that background music contributes to environmental aesthetics by transforming shopping environments and making them more attractive to consumers.

However, while the servicescape and its environmental aesthetics are relatively controllable indoors, many servicescape variables (e.g. temperature) are much less controllable when aspects of the service offer are performed outdoors. Oakes [11] has coined the term ‘musicscape’ to describe a framework summarizing the benefits of high levels of congruity between musical genre and other servicescape variables. to enhance evaluation of the service environment Oakes [12]. However, ensuring congruity between music and other servicescape variables is much more problematic in an outdoor, urban context. The concept of heterogeneity (drawn from the services marketing literature) provides useful theoretical grounding to link and discriminate between live, pre-recorded, indoor, and outdoor music. Live concerts are high in heterogeneity due to the inevitable unpredictability of live performance, whereas pre-recorded servicescape music is low in heterogeneity. The role of music in the marketing of outdoor, urban spaces in terms of three distinct continua: managed/spontaneous, spectacular/mundane, and exclusive/inclusive. The impact of music on their perceptions of the nature of urban space [13] However, the value and potential impact of music (and other performing arts) in terms of changing the character of outdoor urban space, as highlighted by Whyte [14], has been relatively neglected by the marketing literature.

Future Research:

- 1) Is music just an atmospheric at the Sphere?
- 2) Can science be an atmospheric?

<sup>4</sup> <https://www.thespherevegas.com/artists>

- 3) The Sphere has science both indoors and outdoors, what are the implications?

### 2.3 Performance

Performance has always been the driving force for the success of live music. It defines a social or communicative process that requires an audience and is dependent on interpretation; depends on an audience which can interpret work through its own experience of performance; listening” is a performance [15]. But to think of music as performance is therefore to focus on how meaning is created in real time-in the act of performing it, and equally in the act of hearing it, whether live or on a recording [16]. There are lots of ways of making sense of music as performance, and lots of senses there for the making. It really is as simple and a complicated as that [17]. For it to be considered “excellent” it involves a genuine understanding of what the music is about, its structure and meaning. Therefore, evaluation of performance at the Sphere must at least consider the music along with the science.

Future Research:

- 1) Is the performance at Sphere music or science or both?
- 2) Are art, music and science one at the Sphere?

### 2.4 Intimacy and Spectacle

There is probably no better example and/or collision of intimacy and spectacle than at the Sphere. They are traditionally considered as seemingly opposite methods by which artists can affect their audiences. They are “grandeur-a principle of force based on the sheer size and power of the impression; and Intimacy-a principle of attraction that demands a closeness of association between subject and audience and necessitates identification and involvement [19]. Of course, Las Vegas has always been an environment of non-verbal spectacle, providing visual stimulation through lights, animation, colors, symbols, and images [20]. To evaluate the Sphere in this regard perhaps we need to use an interdisciplinary model to the concert spectacle analysis that includes content, structure, and design as they intersect to communicate cultural messages and emotional narratives thus creating a sense of intimacy [21]. But, it is conceivable that music can never explain the visual spectacle alone. It only contributes to it by form and content, subjectivity and objectivity, and self and other [22].

Future Research:

- 1) Does Sphere science facilitate the perfect balance of music intimacy/spectacle?
- 2) Are art, music and science one at the Sphere?



### 3 Conclusion

The Sphere has already garnered a good deal of global popular press attention. It needs more academic attention. It has great potential for influence. Is it good for the art and music or just the science? Hopefully, this piece will stimulate thought and scholarship.

### References

- [1] J. Caramanica, "U2 Returns, in Las Vegas Limbo," *The New York Times*, <https://www.nytimes.com/2023/09/30/arts/music/u@-sphere-las-vegas.html>, September 2023.
- [2] B. Richard, Las Vegas: Past, Present, and Future. *Journal of Tourism Futures*, vol. 4, 3 pp. 182-192, 2018.
- [3] J. Caramanica, "U2 Returns, in Las Vegas Limbo," *The New York Times*, <https://www.nytimes.com/2023/09/30/arts/music/u@-sphere-las-vegas.html>, September 2023.
- [4] <https://www.nytimes.com/2023/09/30/arts/music/u2-sphere-las-vegas.html>, 2023.
- [5] J. Caramanica, "U2 Returns, in Las Vegas Limbo," *The New York Times*, <https://www.nytimes.com/2023/09/30/arts/music/u@-sphere-las-vegas.html>, September 2023.
- [6] R. Garofalo, Pop goes to war, 2001–2004: US popular music after 9/11. In: Ritter J, Martin Daughtry J (eds) *Music in the Post-9/11 World*. New York; London: Routledge, pp. 3–26, 2013.
- [7] D. Allan, "An Essay on Popular Music in Advertising: Bankruptcy of Culture or Marriage of Art and Commerce," *Advertising and Society* vol. 6, 1 2005.
- [8] CBS Sunday Morning  
<https://www.cbs.com/shows/video/jvGAJO263P7UXqTSqP9fCVjGIT1eL7tQ/>, September 30, 2023.
- [9] P. Kotler, Atmospherics as a Marketing Tool. *Journal of Retailing*, 49, 48-64, 1974.
- [10] M. J. Bitner, Servicescapes: The impact of physical surroundings on customers and employees, *Journal of Marketing*, vol. 56, 2, pp. 57–71, 1992.
- [11] R. V. Kozinets, "The field behind the screen: Using netnography for marketing research in online communities," *Journal of Marketing Research*, vol. 39, 1, pp. 61-72, 2002.
- [12] S. Oakes, "The Influence of the Musicscape within Service Environments" *Journal of Services Marketing* vol. 14: pp. 539–56, 2000.

- [13] S. Oakes, "Musical Tempo and Waiting Perceptions," *Psychology & Marketing* vol. 20, 8, pp. 685–705, 2003.
- [14] S. Oakes and G. Warnaby, "Conceptualizing the management and consumption of live music in urban space," *Marketing Theory*, vol. 11, 4), pp. 405-418, 2011.
- [15] W. H. Whyte, *The Social Life of Small Urban Spaces*. Washington, DC: Conservation Foundation, 1980.
- [16] S. Frith, *Performing Rites: On the Value of Popular Music*. Cambridge, Mass.: Harvard University Press, 1996.
- [17] N. Cook, "Between art and science: Music as performance," *Journal of the British Academy*, vol. 2, pp. 1-25, 2014.
- [18] N. Cook, *Beyond the Score*. New York: Oxford University Press, 2013.
- [19] A. Gabrielsson, *The Performance of Music, In Cognition and Perception, The Psychology of Music (Second Edition)*, Chapter 14, pp. 501-602, ed. Diana Deutsch, Cambridge Mass: Academic Press, 1999.
- [20] J. S. Siegel, *Grandeur-Intimacy: The Dramatist's Dilemma*. Diderot Studies, 4, 2 pp. 47-260, 1963.
- [21] J. M. Luo and C.F. Lam, *Entertainment Tourism*. Abingdon: Routledge, 2018.
- [22] L. Burns, and J. Watson, *Spectacle and intimacy in live concert film: lyrics, music, staging, and film mediation in P!nk's Funhouse Tour (2009)*. *Music, Sound, and the Moving Image*, vol. 7, 2, pp. 103-140, 2013.
- [23] S. Hawkins, *Virtual insanity or the real thing?* In "The British Pop Dandy", Chapter 3. London: Routledge, 201

This book presents a collection of selected papers that present the current variety of all aspect of music research, development and education, at a high level. The respective chapters address a diverse range of theoretical, empirical and practical aspects underpinning the music science and teaching and learning, as well as their pedagogical implications. The book meets the growing demand of practitioners, researchers, scientists, educators and students for a comprehensive introduction to key topics in these fields. The volume focuses on easy-to-understand examples and a guide to additional literature.

Michele Della Ventura, editor

## **New Music Concepts and Inspired Education**

Revised Selected Papers

ISBN: 978-88-944350-9-2



[www.studiomusicatreviso.it](http://www.studiomusicatreviso.it)