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A Stillness in the Desert? Engaging the Public through an Immersive Exploration of Southwest Soundscapes

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A STILLNESS IN THE DESERT?

Engaging the public through an immersive exploration of Southwest soundscapes.

- **TOM BJELIC, M.P.S.E.** // FILM
- **JULIAN KILKER, PH.D.** // JOURNALISM AND MEDIA STUDIES



In this photograph captured 50km south of Las Vegas, light pollution distorts the night sky. Do sounds from air and road traffic similarly change the outdoor experience?

Photo:
Julian Kilker

► ABOUT THE COLLABORATORS

Tom Bjelic is a Sound Designer with over 30 years of experience in the film and television industry and has amassed hundreds of screen credits. His work is internationally recognized, and has earned him an Emmy award and several nominations in addition to his many Directors Guild, Genie, Golden Reel, Gemini and Canadian Screen Awards. Professor Bjelic is a founding partner of Urban Post, one of Canada's largest post-production studios. He now brings a wealth of experience into the classroom as Assistant Professor in the UNLV Film Department.

Julian Kilker, Associate Professor, School of Journalism and Media Studies, focuses on visual media, social issues and innovation. His scholarly work has been published in *Visual Communication Quarterly*, *Social Identities*, *Convergence*, *IEEE* journals, and *The Public Historian* and his creative research in solo photography exhibits in Switzerland, California, and Nevada. He's received awards from the Broadcast Education Association, *Management Communication Quarterly*, the Association for Educators in Journalism and Mass Communication, the Nevada Press Association, and KNPR's *Desert Companion*.

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► PROJECT DESCRIPTION

The Las Vegas region is a compelling site in which to explore and document visual and audio ecologies through immersive media. While light pollution is already extensively addressed in scholarly research (Rodrigo-Comino et al., 2021), popular works, such as *The End of Night* (Bogard, 2013), and public engagement (e.g., The International Dark Sky Association), the complex interplay of sound, natural resources, and public engagement is still emerging, particularly in creative fields (Paine, 2017).

Public engagement regarding soundscapes is highly relevant now. Southern Nevada's tourist economy, regulatory climate, and urban-rural landscape leads to a complex and contested mixture of audio ecologies. In recent years, the pandemic highlighted the anthropocentric nature of soundscapes (Droumeva, 2021), while the recent popularity of electric cars, quadcopters, and "noise cancellation" earbuds demonstrate how consumer products can rapidly change our awareness of sound.

A combined creative and scholarly approach is particularly useful in exploring and documenting—and engaging with the public about—soundscapes. Two UNLV scholars and artists plan to collaborate on this project: Julian Kilker, who specializes in visual and emerging technology research, and Tom Bjelic, who is a highly experienced sound design and field recording expert. Over the past decade, Tom has collaborated with audio field recordists around the globe to capture and produce soundscapes for narrative film and television, while Julian has documented light pollution while capturing landscapes in the Mojave at night and collaborated on multiple environmental conservation media projects.

We plan to use audio and visual field recordings to create an immersive multimedia project about soundscapes as natural resources. Our goal is to capture both audio and visual assets to explore standard and extended reality (AR and VR) media experiences. We first plan to record soundscapes using a multi-microphone array to capture audio in a 360 degree sphere while documenting each context with wide-angle and 360 cameras. To capture vibration and ultra-low frequencies we can use a surface microphone to capture subsonic information. Additionally, we may use hydrophone-based transducers to capture subsurface/underwater sounds in aquatic natural resources. We plan to process the sound files using Dolby Atmos software to create binaural immersive (for headphone) and surround sound (for theatrical-style) experiences, and create visualizations such as spectrograms from the audio data. We will combine the sound and visual materials for an engaging experience.

► REFERENCES

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