# Article information:

A review of audio-visual interaction on soundscape assessment in urban built environments - ScienceDirect
<https://www.sciencedirect.com/science/article/abs/pii/S0003682X19313532>

# Article summary:

1. Soundscape is the acoustic environment as perceived or experienced by humans and has become an important area of environmental acoustics research in recent years.

2. Audio-visual interactions can significantly influence the results of soundscape assessments, and there has been a growing interest in how different combinations of aural and visual scenarios may be utilized to effectively improve sound perception.

3. To optimize the soundscape quality of an existing environment, a conceptual framework of soundscape design strategies with audio-visual interaction had to be established, which includes the design of audio-visual components and urban planning methods.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article "A review of audio-visual interaction on soundscape assessment in urban built environments" provides a comprehensive overview of the existing research on the impact of audio-visual interactions on soundscape assessment and design. The authors have conducted a systematic search on the Scopus scientific database and identified 115 publications that were sorted into three groups based on their topic.

The article is well-structured, with clear headings and subheadings that make it easy to follow. The introduction provides a good overview of the concept of soundscape and its importance in our daily lives. The authors also highlight the shift towards a soundscape approach to design, which represents a paradigm shift in our understanding of the acoustical environment.

One potential bias in this article is that it focuses mainly on positive effects of audio-visual interactions on soundscape assessment and design. While there are some references to negative effects, such as annoyance caused by traffic noise, these are not explored in depth. This could be due to the fact that most studies have focused on improving sound perception through audio-visual interventions rather than reducing negative impacts.

Another potential bias is that the article focuses mainly on laboratory experiments rather than real-world scenarios. While laboratory experiments can provide valuable insights into how people perceive soundscapes under controlled conditions, they may not reflect real-world situations accurately.

The article also lacks discussion around potential risks associated with audio-visual interventions in urban built environments. For example, adding visual elements such as screens or projections could increase light pollution or distract drivers, leading to safety concerns.

Overall, this article provides a useful overview of the existing research on audio-visual interactions and soundscape assessment and design. However, readers should be aware of its potential biases towards positive effects and laboratory experiments over real-world scenarios.

# Topics for further research:

* Negative effects of audio-visual interactions on soundscape assessment and design
* Real-world studies on audio-visual interventions in urban built environments
* Risks associated with adding visual elements to improve sound perception
* Safety concerns related to audio-visual interventions in urban areas
* Impact of audio-visual interactions on light pollution in urban environments
* Perception of soundscapes in natural environments compared to urban built environments

# Report location:

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