

# The Sounds of Two Landscape Settings: auditory concepts for physical planning and design

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## Sustainable development

Sonic aspects relevant to **landscape architects and planners** are examined in order to show that **soundscapes** can be acknowledged and developed as an aesthetic resource for **sustainable development**.

- **sustainable development** needs to consider **all human senses** to create supportive environments in everyday life.
- in addition to remaining within ecosystems' carrying capacity, quality of life should continue to improve.

*'Urbanity' is also based upon the citizen's capacity to symbolically recognize themselves in their own city and the greater the **sophistication** of urban shapes, the more rich and sensitive the effects that they will induce. (European Commission, 1996, p. 177)*

➔ we argue that informed design of outdoor soundscapes can contribute to such **sophistication**.

This **auditory approach** aims at  
an **inter-sensory understanding** of human perception  
and its significance  
for the design of physical environments.

## Objective

- is to make **sonic aspects manageable** for practitioners.
- is to contribute to the development of a framework for a site soundscape **terminology**.

## Method

**Rendering by skilled listeners** – a preliminary framework for a pattern language.

- we draw on Christopher Alexander's approach of generalizing from patterns found on particular sites to a universal **pattern language** for site design. (*Alexander, Christopher (1977). A Pattern Language: Towns, Buildings, Construction*)
- 18 people were interviewed individually on two sites.
- These informants were considered to be **skilled listeners**.



case 1:  
Pasture landscape on a city fringe

The pasture landscape in the Håga valley, Uppsala, Sweden. Source: Photo Per G. Berg, summer 2001.



case 2:

A formal public garden in a city centre

The formal garden Linnéträdgården in the city centre of Uppsala, Sweden.

Source: Photo Noel Naanep, spring 2002.



A pasture soundscape contained a mild background and comparatively stronger figures came clear.

case 1:

Pasture landscape on a city fringe

The dimension of **clarity** is understood as the **relation between sonic figures and background**.

- **the results of clarity** were highly **correlated with distance** from the fields to the urbanized areas and the human activities.
- land use and landscape planning are important influences on the **maintenance of distance** between such landscapes and urban areas, **→** and thus, can help **maintain the integrity of soundscapes**.



A public city garden soundscape contained a dominant background relating to an absence of figures and adjacent sounds.

case 2:

A formal public garden in a city centre

- One of the informants explicitly commented that one purpose in visiting a city garden is that it allows the visitor a space where other city sounds are kept at a distance.
  - ➔ According to our study, the city garden offered open space with some tranquillity and quietude.

**Clarity emerged as one cardinal principle for auditory refuges**, and it was found to be related to the balance of particular sonic features and their background sounds.

The obvious **need for distances** between many sound sources and listeners is a useful argument against the contemporary trend in urban planning for compact cities (see, for example, Naess et al., 1998).

A practical conclusion was that **distant sound sources** might function as preliminary indicators of sonotope conditions.

We believe that a more progressive **acoustic design is needed** in the case of city gardens to avoid feelings of weak identity (as long as the surroundings are dominant).

**The aim of our research** is to raise consciousness of the scope for sonotopes in planning and design.