

Core Affect Moods as attitudes towards the world

Chaotic

The environment taxes
real-time understanding,
resists a stable interpretation,
or is indicative of insecurity.

Boring

The environment does
not provide interesting
or useful affordances
and is not indicative
of safety.

Pleasantness vs Eventfulness

The role of sound in life, as described above, is consistent with recent results in the field of soundscape and emotion. Research addressing how we appraise sonic environments has led to two main appraisal dimensions: unpleasant-pleasant and uneventful-eventful². These dimensions are closely related to the concept of core affect in emotion theory. Core affect is an integral blend of the dimensions displeasure-pleasure and passive-active³. Unlike emotional episodes, which are relatively infrequent, core affect is continually present to self-report. And the same holds for appraisal. These main dimensions, and the intimate relationship between moods and appraisal, allowed us to define four qualitatively different types of sonic environments in terms of their pleasantness, eventfulness, complexity of action selection, and affordance content⁴.

Audible safety:

We hypothesize that, from an evolutionary perspective, the first role of sound is to warn in case of possible danger, and if possible to establish audible safety¹. Indicators of audible safety are sounds that indicate normalness, and especially sounds of people engaging in activities they would only pursue if they feel safe. Audible safety seems to be estimated by subcortical processes. When a situation cannot immediately be appraised as safe, extra cortical attentional resources are activated. This forces people to be more alert, or vigilant, with prolonged stress and arousal as a result, which in turn can lead to more serious behavioral or health problems.

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References:

- ¹ Van den Bosch, K.A., Andringa, T.C. and Vlaskamp, C., (submitted). Safe and Sound: the importance of audible safety for people with intellectual disabilities. (submitted, 2013).
² Axelsson, O. Nilsson, M.E. and Berglund, B., 2010. A principal components model of 'soundscape perception'. The Journal of the Acoustical Society of America, 128(5), pp.2836–2846.
³ Russell, J.A., 2003. Core affect and the psychological construction of emotion. Psychological Review, 110(1), pp.145–172. doi: 10.1037/0033-295X.110.1.145
⁴ Andringa, T.C., 2013. Soundscape and its Relation to Core Affect, Appraisal, and Motivation. In: European Acoustics Association, Merano, Italy 18-21 March 2013.

Lively

The environment provides
many interesting or useful
affordances and indications
of safety.

Calm

The environment forms a stable,
consistent, and harmonious whole
with ample indications of safety.



Affordances vs Complexity

The complexity depends on the prevalence and reliability of indicators of safety, and makes it difficult to select appropriate behavior. Highly complex or chaotic environments are difficult to interpret (e.g., due to an overabundance of sound-producing activities) or actively indicative of insecurity. A boring sonic environment is low on useful audible affordances and is also not indicative of safety. In contrast, a lively environment represents many affordances that provide ample interesting opportunities to attend to and is indicative of safety. The fourth environment is a calm or relaxing one because it is harmonious, provides ample indications of safety and a low rate of events, and as such allows full freedom to relax and recuperate¹.