Guidelines for Analysis and Concept Development

Sound Design for Interactive Commodities

Preproduction

First of all, create a sufficiently detailed scenario of use, in the form of a story (possibly illustrated). This covers the process of the interaction, the actants involved and the various functions. This scenario will be refined further as you proceed in the process outlined below.

Note: The numbers do not necessarily mean a sequential order! There is a tight interaction between spotting and audio research.

1. **"Spotting" of the scenario**

   A scenario (like a film script) is analyzed for potential sound use. Please follow the subsequent questions and *formulate possible approaches* for the sound design:

   1.1. Identify the essential components of the interaction. It helps to look for "turning points" in the "narrative" of your scenario. Usually, these are linked to a specific task or intention of the user or a function of the device. Important categories are: (de)activation, (dis)connection, transformation, idle/active state and state changes in general

   1.2. Narrative Spotting
   Identify the "narrative metatopics" associated with your interaction as a whole and for each essential step and how it could be manifested in sound. A list of metatopics, the underlying narrative categories and references to clips for an audio research can be found in the table "*Clips and Narrative Topics*".

   1.3. Spotting related to Agency, Expression and Performance

   1.3.1. Identify the *location of agency* in general and at each important stage:

   - **User(s)** > Artefact,

   - **User(s) qua Artefact** > other people,

   - **Artefact** > User(s) or other people

   - **Artefact** > other artefact(s) (or the environment)

   1.3.2. Identify the quality of the action(s) in relation to other actions and events: Is it a basic action, a variation of it, an "enhanced" version or a unique event? Is it one among many, or does it lead to a significant change/transition (e.g. change of state)

   1.3.3. Is there a underlying narrative, which gets "modulated" by the way an action is performed? This includes e.g. failed actions.

   1.4. Define the situational qualities of the interaction / artifact.

   - Is it meant to be used in private or public?

   - Is the artifact rather intimate, close to the body or more distant, entirely detached or does it "surround" the user?

   - Is it characterized as a (rather passive) tool or a rather active assistant?

   - Is the use rather casual or very focused and professional?

   1.5. Define the typological characteristics of the artifact

   - Authentic: Simple, self-contained. Sound complies with expectations, fit with existing sonic identity

   - Extended: Simple object with add-on. Sound not necessarily related to object's sonic identity, communicates extension quality

   - Placeholder: E.g. Wii mote or TUIs: Proxies of a virtual object. Sound defines the virtual object, within gestural and formal constraints

   - Omnivalent: Defined through software rather than physical configuration. Sound defines the artifact

2. Audio research & reference listening.
Use both media and field research as source. Select the most relevant clips and build a project-specific sound library.

2.1. Field research: Look for everyday interactions that can be associated with qualities you defined in the spotting. Also this is necessary to identify what makes a sound familiar in a given context, or how you could defamiliarize a sound (see below)

2.2. Narrative media: Provide rich material to explore narrative topics and their realization in sound. Often it is even possible to rely on sonic codes established in films and games.

2.3. Performative and expressive properties: explore associated, metaphorical and actual sonic manifestations. This requires the production of improvisational prototypes, combining foley techniques with samples from media and field recordings

3. Compositional and dramaturgic conception

3.1. Define the criteria that will unify and integrate all the aspects developed above and contribute to a coherent experience. This may also relate to a branding concept or a corporate identity or to expectations of the target group. Be aware, though, that "rules" may have to be broken and surprises have to be made.

3.2. Describe the dynamic morphology of the interaction. What is the overall dramaturgy? A representational drawing can help to clarify (e.g. energy level, tension/release, interacting or related processes).

3.3. Describe dynamic morphology of each relevant component of the interaction, using words and graphical representations (for instance using Laban Movement Analysis).

3.4. Define the action – sound relationship, relating movement analysis to sound morphology (this relates to the questions about performance and agency above).

  ▪ More or less isomorphous and direct link: The sound relates directly to performative/gestural qualities

  ▪ Link and similarity is indirect, delayed or established through knowledge about the link: The sound expresses an effect on a system and the system's "reaction"

  ▪ Not isomorphous, gesture triggers sound, which develops autonomously

3.5. Grouping or differentiating sounds (and actions) by Gestalt criteria (nearness, similarity, continuity, belongingness, common fate)

Production: Common Design Strategies

From movies and other evolved sound design domains the following strategies have proven to be useful:

– Defamiliarization, ambiguity: Maybe the most important design strategy. Works on samples of easily identified sounds, e.g. by changing pitch, cutting beginning, reversing, distortion. Often a trace of the original quality should be maintained

– Anthropomorphization: traces of human or animal utterance

– Naturalization / physicalization: a synthetic sound is "shaped" or mixed in such a way that it reminds of a natural source (simulation, mimicry)

– Abstract-concrete hybrids: Traces of materiality in abstract sounds

– Organic or inorganic quality: a fundamental direction in sound design, either as basic quality or as a "trace" to contrast a given identity (e.g. cyborg)

– Association with *archetypal templates*: similar to anthropomorphization, but extended to natural sounds more generally

– Coded processing techniques like the use of reverb, unnatural "enlargement" etc. Is known for example from subjectivized film sequences

– Avoid too obvious indexes or iconic sounds: the representation might become a (inappropriate) presentation.

General Remarks:

– For describing the sounds, their aesthetical quality and their meaning, use the sound analysis toolbox

– If a description of a sound is insufficient, use example sounds that cover a specific aspect you want to represent.