PART 1.3 · ABOUT 6 MINUTES

Imagine the sound environment

Start from the experience, then choose the sounds.

What environment are you creating?

- Are you in a control room, a jungle, on a boat?
- It can be realistic or abstract: a literal environment or a collection of experiences.
- What kinds of sounds are in it?
- What feeling do you want to bring about?
- Imagine the environment, then jot down five sounds.

EXAMPLE

Beside a creek in a forest, mid-fall

1. Moving water
2. Birds overhead (which birds?)
3. Leaves rustling
4. A diffuse melody
5. An ambient pad

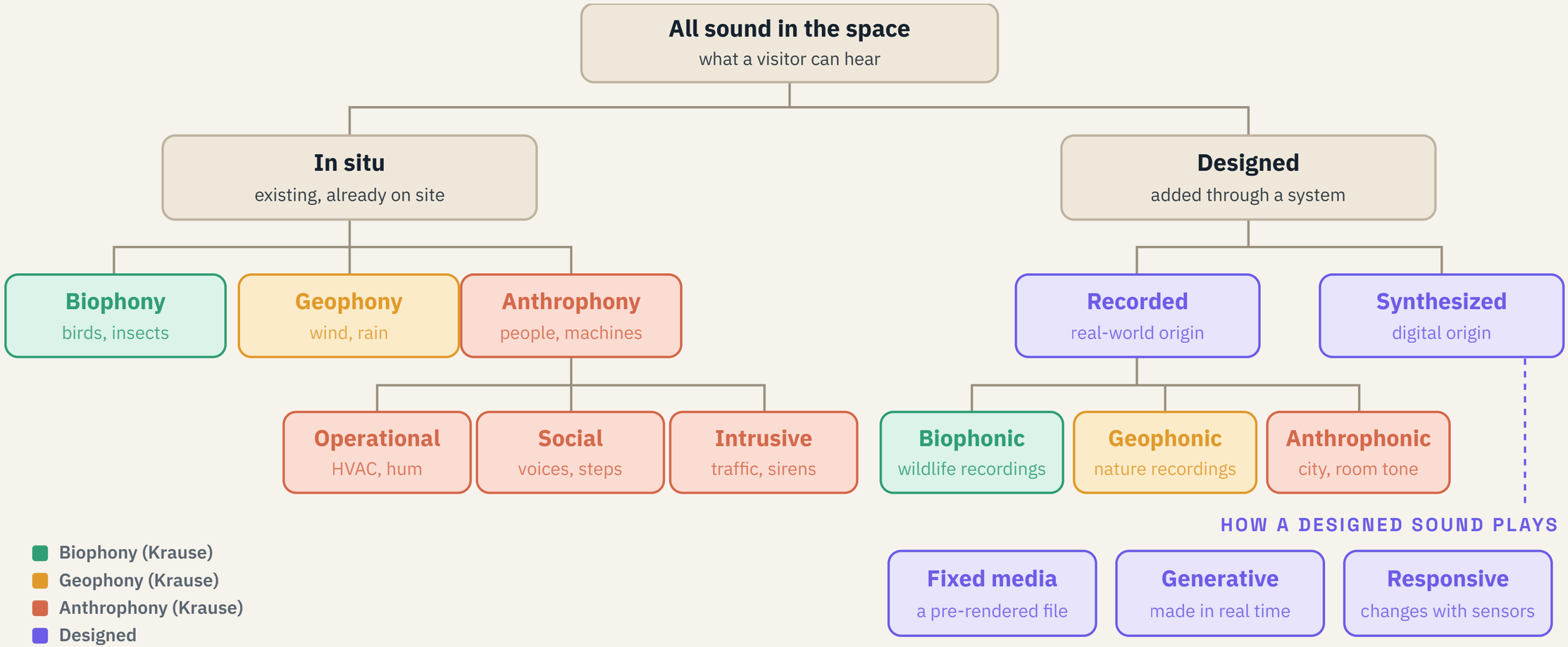
EXAMPLE

A history of recorded sound gallery

1. A wax cylinder crackling
2. A 1920s dance band, far off
3. A typewriter and a phone ringing
4. Voices from old radio
5. A low room tone

PART 1.3 · THE SOUND TREE

How can we categorize sounds?



Two questions before Krause’s three

Is it already here?

In situ (existing, on-site) sounds are already in the space: the HVAC, the visitors, the traffic outside. **Designed** sounds are added through a system you design.

Where does it come from?

A designed sound can be **recorded** or **synthesized**. Either way it still belongs to a family: biophony, geophony or anthrophony.

Which sounds grab you?

Is a sound intrusive, operational or social? Which ones pull your attention, and which do you tune out?

Terms we’ll use from here on · Fixed media: a pre-rendered audio file. **Generative:** audio made in real time by a music system. **Responsive:** audio that changes when visitors interact with sensors.

Location

where the sound sits, and whether it moves

Time

when it plays, and for how long

EQ

its tone: more low end or more high end

Volume

how loud it is next to everything else

PART 1.3 · SPATIAL SOUND MIXING

Four parameters of mixing

Location, time, EQ and volume: the same tools used to mix music, now applied to a room. That is mixing in space.

- Is the sound in the background or the foreground?
- Is it still, or does it move?
- In museums, movement often gets lost. The less things move, the more people notice when something does.

PART 1.3 · SPATIOTEMPORAL CHANGES

Where, when and how loud, over time

Not every sound places equally

We pinpoint high-frequency sounds easily and low-frequency ones hardly at all. You can locate a bird, but not a refrigerator hum.

Give moving sounds a path

Hard-automated: pans the same way every playthrough.
Systematic: follows a rule, like moving 45° left and right every ten seconds.

Shape loudness over time

Which sounds play at once? Which should dip when another arrives? Letting sounds make room for each other is how a scene starts to feel real.

PART 1.3 · EXPERIENCE DESIGN

Sound can move people

Moving sound can tell a story and simulate an environment. It can also guide visitors.

- A sound draws a listener closer to it
- A sound plays every ten seconds
- A sound changes volume as a listener approaches (sensor-driven)
- A sound changes as goals are reached (game-like)

Ask about your exhibit

- Is it linear, or self-directed?
- How will visitors move through it?

Part 1.4 puts the answers on a map.